INTERNATIONAL CONFERENCE ON INNOVATIVE AND ADVANCED TECHNOLOGIES IN ENGINEERING

(ICIATE-2019)

Date: 27th To 29th March, 2019

Venue: Atharva College of Engineering

ICIATE-2019

CONFERENCE PROCEEDING

Organized By

AET's

ATHARVA
COLLEGE OF ENGINEERING

Atharva College of Engineering

Mumbai

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ICIATE – 2019
Conference Proceeding

This is proceeding of a conference entitled "International Conference on Innovative and advanced Technology in Engineering ICIATE-2019, which was sponsored by Atharva College of Engineering, Malad, Mumbai and held on 27th to 29th of March 2019.

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Instruction to authors:
For a paper to be considered for publication it is a pre-condition that it is not submitted for publication elsewhere, contains results that are new significant and of interest to a wide section of engineering and science community. Editors may invite papers on special topics of current interest.

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Hon. Shri Sunil Rane

(Executive President, AGI)

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Director

Dr. S. P.Kallurkar

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ATHARVA
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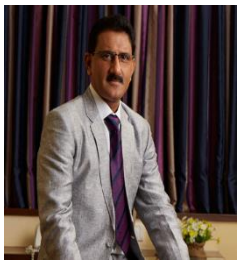
Message from Executive President Atharva Group of Institutes



Mr. Sunil Rane
Patron

It gives me immense pleasure that Atharva College of Engineering is organizing its 3rd International Conference on Innovative and Advanced Technologies in Engineering (ICIATE-2019) in the month of March 2019 at Atharva College of Engineering, Malad, Mumbai.

The theme of the conference is "Digital Transformation". This conference provides a platform to meet International Researchers, Engineers, Scientists and Industrialists to share and discuss advances and challenges in Digital Transformation. The conference offers a premise for global experts to interact on the topics Communication and Networking, Applied Computing and IT, Advanced research in science Technology and E-Learning.

I am privileged to say that this conference will definitely give solutions to our societal problems and I hope the speakers will cover digital transformation theme from different perspectives.

The success of this Conference is solely depends on the dedication and efforts by ICIATE team members who are working on the preparations from almost a year in many ways to make this Conference become a reality. Eventually I express my special thanks and appreciation to all. I wish ICIATE 2019 all the best for its success.

Mr. Sunil Rane
Executive President
Atharva Group of Institutes
Malad, Mumbai

ATHARVA
COLLEGE OF ENGINEERING

Message from Director's Desk

Dr. P. N. Nemade
Conference Advisor

I am contented to welcome you all for the third International Conference on Innovative and Advanced Technologies in Engineering being organizing on during 27th to 29th March 2019 by Atharva College of Engineering, Malad, Mumbai.

Atharva has right blend of innovation, technology and research. Atharva is a hub of aspiring engineers and researchers with its exemplary vision. There various events in the conference bring together Engineers, Researchers, Scientists, Industrialists, Academia experts and Students for sharing their valuable ideas, recent trends.

The conference is multidisciplinary in nature covering areas like Digital transformation, communication and networking, applied computing and IT, E-learning etc. It includes keynote speakers address from experts and paper and poster presentation by scholars. Its pride moment to welcome all participants to this international conference.

The conference promises to transcend to a new and unprecedented level of excellence. It is thus the zenith where technology and skill meets opportunities and guidance. One should not miss opportunity to be part of this conference. I wish ICIATE 2019 a grand success.

Dr. P. N. Nemade
Director
Atharva College of Engineering
Malad, Mumbai

ATHARVA
COLLEGE OF ENGINEERING

Message from Principal's Desk

Dr. S. P. Kallurkar
Conference Advisor

I, from Conference Chair invites you all to be a part of "3rd International Conference on Innovative and Advanced Technologies in Engineering 2019". The conference aims to bring together Researchers, Scientists and Industrialists from all over the world to share concerns related to advances and challenges in digital transformation.

I on behalf of complete ICIATE 2019 team, welcome all delegates of the Conference. I appreciate the efforts taken by all authors, sponsors and keynote speakers for their support and co-operation. The conference theme is digital transformation. Change is a nature of life so as technologies. This rapid change in technology is changing our lifestyle and helping in solving many societal issues. We are fortunate to have expert speakers to share their experience and to contribute solutions to the problems.

I hope the multidisciplinary approach of this Conference will help everyone to learn from different disciplines. I would like to express my gratitude towards the organizing committee for their dedicated efforts to materialize the conference. I hope all the participants will have a fruitful and beneficial experience.

Finally, I congratulate HOD, college faculty, student representatives and participant for their efforts in organizing and participating in this conference and wish the conference all the success.

Dr. S. P. Kallurkar
Principal
Atharva College of Engineering
Malad, Mumbai

Messages from Advisory Committee

Dr. Abhay Wagh

Message

It is my honour to be a part of "International Conference on Innovative and Advanced Technologies in Engineering (ICIATE-2019)" organised by Atharva College of Engineering.

Digital Transformation is reinventing organizations through the use of digital technology. The pace of change over the last few years has been hugely significant with businesses accelerating their digital capabilities at an astonishing rate.

With this rapid transformation comes the need to properly harness digital technologies and put them into effective use. The Digital Transformation Conference brings together leaders spearheading digital initiatives in their organizations to offer insights, education and case studies on what can be a confusing environment. This Conference will certainly provide a platform for exchanging scientific ideas on these latest Digital trends.

I wish all the success to organising team of the Conference.

(Dr. Abhay Wagh)
Director
Directorate of Technical Education
Maharashtra State, Mumbai

Dr. Aditya Abhyankar

The conference titled International conference on Innovative and Advanced Technologies in Engineering provides a platform for discussions on various technical topics related to engineering as well as science and technology. This is a conference of international significance. The proceedings represent scholarly work of advanced and innovative thinkers and educators from around the world. It is felt that it is only through the exchange of information that one can hope to keep up with the rapidly changing world around us. I wish all the delegates, a great educational and informative experience at the conference. My best wishes to the organizers of the conference.

Dr. Aditya Abhyankar
Dean, Pune University,
Maharashtra

Dr. Ashish Mathur

It gives me immense pleasure to be a part of the 3rd International Conference on Innovative and Advanced Technologies in engineering 2019". I believe this conference will provide tools to overcome significant problems appearing in the industry or society by the innovative ideas and technologies of researchers and students.

The success of the conference will encourage us in introducing many more initiatives for innovative trends in the coming days. I wish the Conference a great success.

Dr. Ashish Mathur
Assistant Professor,
Dept. of Electrical Engg.,
IIT Jodhpur

Dr. Venkata Yaramasu

The technology used in various fields of engineering is advancing at a tremendous pace every passing day. There has been a boom in the usage of internet and the demand for high speed access to video and data is ever increasing. 10 years before, 3G and 4G were a distant dream, but today a lot of research is going in the field of 5G as well.

In such a scenario, organizing such a conference is of paramount importance. This will enable researchers from different domains to share their views on a common platform. Particularly, I would like to congratulate Atharva College of Engineering (ACE), Mumbai for taking such a promising initiative. This will not only help the students by opening the vistas of opportunities in various fields of engineering, but also promote learning and sharing of ideas for the faculty members. I am confident that this conference will indeed generate a lot of interest among the students to explore and pursue the area of research, thereby bringing laurels to your institute and developing our society as a whole.

Dr.VenkataYaramasu,

Northern Arizona University,

USA

Mr. Sachin Sadare

The conference is an international platform for sharing new perspectives in the areas of science and technology with transforming context. Many educators share their experiences, practices, and perspectives to accelerate educational changes in the environment of today's world that is always in a state of flux. The papers, discussions, and interactions during the conference will bring forth multiple viewpoints and address issues of critical importance. My best wishes to all participants of the conference to make the most out of this event by learning innovative and advanced technologies.

Mr. Sachin Sadare
Founder & Director,
IdeaNutz Consulting,
Mumbai, India.

Dr. Rakesh Saxena

Message

The conference provides forum for growing researchers, educators, engineers and students from different parts of the country and world to exchange their views explore the enabling technologies, discuss innovative methods for the advancement in technologies. The contribution made by delegates has been over – whelming. I further hope that this conference encourages all participants to come up with new ideas in various fields which will be of major benefit to the mankind. Advanced technology is one of the basic instruments of growth. Innovation flows out of creativity and plays a vital role in advancement of technology by reducing input efforts and achieving multifold, desirable and adaptive outputs.

Finally, I congratulate the team members and participant for their efforts in organizing and participating in this conference and wish the conference all the success.

Dr. Rakesh Saxena
Director SGSITS,
Madhya Pradesh India

Dr. Amiya Kumar Tripathy

It gives me pleasure that Atharva College of Engineering Mumbai is organising InternationalConference on “Innovative and Advanced Technology in Engineering”2019 (ICIATE 2019). I am sure that the interaction of participants throughout the globe, internationally renowned counterparts will go a long way in knowledge sharing to help Industry, Society to grow and to compete globally. The proceedings connote scholarly work of state-of-the-art thinkers and educators from around the world. It is felt that, it is only through the exchange of information that one can hope to keep up with the rapidly changing world around us.

I wish all the delegates, a great educational and informative experience at the conference. My best wishes to the organizers of the conference and I congratulate the Institute on preceding this wonderful step.

Dr. Amiya Kumar Tripathy
Advisor, Computer & IT Engineering, DBIT, Mumbai, India
Adj. Professor, Edith Cowan University, Perth, Australia

Dr. Mathew T Mathew

I am pleased to know that Atharva College of Engineering is organizing "International Conference on Innovative and Advanced Technologies in Engineering 2019 (ICIATE‟19)". The institution is creating a platform for the industrialist, professionals, researcher and students to share and express their views on Innovative and Advanced Technologies in Engineering. It is absolutely essential to nurture the innovative capabilities of students as they are the future of our country and in that context it is very relevant that Atharva College of engineering, Mumbai has organized this conference.

Dr. Mathew T Mathew,
Associate Professor
UIC School of medicine,
Chicago, US

Dr. Paresh J Shah

The conference titled International conference on Innovative and Advanced Technologies in Engineering provides a platform for discussions on various technical topics related to engineering as well as science and technology. I would like to congratulate Atharva College of Engineering (ACE), Mumbai for taking such a promising initiative. This will not only help the students by providing knowledge of upcoming trends in various fields of engineering, but also promote learning and sharing of ideas for the faculty members. I am confident that this conference will indeed generate a lot of interest among the students to explore and pursue the area of research, thereby bringing laurels to your institute and developing our society as a whole.

Dr. Paresh J Shah

Professor & Head of Electrical Engg. Department,

SSBT's College of Engineering and Technology, Jalgaon - 425001

Mr. Manoj O. Jacob

I am extremely glad to be a part of this International conference, which provides opportunities for the different areas delegates to exchange new ideas and application experiences face to face, to establish business or research relations and to find global partners for future collaboration. We hope that the conference results constitute significant contribution to the knowledge in these up to date scientific field. In today's highly dynamic environment innovative and advanced technologies are giving the new picture to the present world.

Mr. Manoj O. Jacob
Lead Mechanical Engineer,
Melbourne, Australia

Mr. Sunil Issac

Digital technologies are creating a big buzz in the world today. It is changing the way businesses are operating. It is expected to create an even bigger impact in the years to come.

Going digital is the latest fundamental shift in technology and it may be the most impactful in the future. It is a culmination of many digital technologies that come together to create a new world. SMAC (social, mobile, analytics and cloud) technologies have provided the foundational technologies for Internet of Things, Automation, Sensors, 3-D printing, robotics, wearable and multiple other technologies that may still be nascent today like augmented reality, machine learning and artificial intelligence.

Digital technology today, in every enterprise, has a very important role to play. Students can concentrate on digital projects by working on the foundational technologies that make rich and relevant digital experiences possible. SMAC, Internet of Things, Automation and Sensor networks are some of the key areas that students can work on – to enhance their knowledge and bring a meaningful impact to their careers.

My best wishes to all students of the conference to make the most out of this event by learning the applications of digital technologies.

Mr. Sunil Issac
Vice President
KAM Ericson, Malaysia

Dr. Jonathan Joshi

The conference not only is a platform for the professionals but also the society to appreciate the wonders created by innovative ideas. It gives me immense pleasure to welcome you all on the conference and hope that everyone has a magnificent experience. The Advanced Technologies Initiative provides important insights on global innovation trends, and highlights the challenges faced by researchers in maintaining or improving their technology. Finally, I congratulate the team members and participant for their efforts in organizing and participating in this conference and wish the conference all the success.

Dr. Jonathan Joshi

CEO Eduvance,

India

Mr. Paul C. Mathew

I am happy to learn that Atharva College of engineering, Mumbai has organized this conference ICIATE-2019. Today the technology is developing at a very fast pace. We experience new development every day and every moment. Technology is changing and new areas of research are coming up. I hope that this conference would certainly induce innovative ideas among the participants about new inventions and new technologies in the engineering sector. I wish all the success to the ICIATE and the Organizers of the international Conference.

Mr. Paul C. Mathew
Director,
Enterprise Architecture training
& consulting services pvt.ltd.

Mr. David C. Mathew

It is absolutely essential to nurture the innovative capabilities of students as they are the future of our country and in that context it is very relevant that Atharva College of engineering, Mumbai has organized an international conference on the subject of “Innovation and Advanced Technologies in Engineering”.

Academic institutions are the evergreen sources of innovation as they get batches of fresh and young minds regularly. Innovative technologies sourced from academic institutions have done miracles worldwide. However, it takes a long time and lot of efforts to translate an idea to its commercial form along the, innovation chain.

Mr. David C. Mathew,
Director, Sales,
Wipro, Australia

Dr. S. G. Bhirud

I am glad to be the part of the 3rd International Conference on Innovative Technology in Engineering -2019. The events in the conference are targeted towards researchers, practitioners, professionals, educators and students to share their experience, innovative ideas, issues, recent trends and future directions in field of Engineering and Science and Technology.. Finally, I congratulate the team members and participant for their efforts in organizing and participating in this conference and wish the conference all the success.

Dr. S. G. Bhirud

Professor,

Computer Department,

VJTI, Mumbai.

Messages

From

Organizers

International Conference on Innovative and Advanced Technologies in Engineering (ICIATE-2019)

Mrs. Karuna Nikum

The conferences have to be organized at various levels to offer a platform to various levels of researchers. This ICIATE-2019 provides a forum to all researchers to exchange the information on research and innovations and enhance the quality of research.

The conference provides a platform for researchers to get networked and exchange the ideas on various areas such as Communication, Signal and image Processing, VLSI, Wireless Networks and IOT. High quality deliberations that happen in conference will lead to high standard publications at international levels which feed into the industry's innovation pipeline. Industry expects such inputs to create innovation and the next big things.

I wish all the participants a happy stay in campus and a fruitful interaction on their works.

Mrs. Karuna Nikum

(Assistant Professor)

Mrs. Deepthi Shekhar

It is encouraging to celebrate the “Innovative and Advanced Technologies” (ICIATE-2019), at Atharva College of Engineering, Mumbai to gather experts in the field of electronics, computers, and communications. It is even more encouraging if the symposium can gather researchers from academia, industry and at the same time let students to attend the symposium. On one hand, we have the academia in close contact with students, the future engineers that very soon will take over the role of being highly-qualified professionals in technical companies either in India or abroad. On the other hand, we have researchers in industry to show their latest advances to transform research into real products.We are lucky to live this revolution in technology.

This scenario is an ideal place to collaborate and to meet new players in the field. People from academia not only can share their knowledge with their peers but also can establish collaborations with companies and even with other research groups. At the same time, students, either pre-graduate or graduate, have the opportunity to be in close contact with the future world. An event like this helps to better decide their future path in life.

We should take the ICIATE-2019 event as an excellent opportunity to share our advances in the field, to create synergies between different researchers in academia and industry, to analyze how technology is evolving, and finally to motivate our young engineers to do it better than us.I wish you the best experience.

Mrs. Deepthi Sekhar

(Assistant Professor)

Mrs. Kavita Bani

It is my pleasure to welcome all the attendees for the International Conference on Innovative and Advanced Technologies" (ICIATE-2019), at Atharva College of Engineering, Mumbai. The marvels of human mind perennially persuade the gathering and growth of human knowledge. In bringing out this volume of scientific knowledge, every individual will be largely benefited from the ICIATE-2019. It is my humble wish that the professional dialogue among the researchers, scientists, engineers, students and educators continues beyond the event and that the friendships and collaborations forged will linger and prosper for many years to come.

Sincerely,

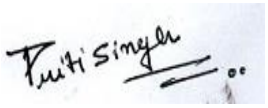
Mrs. Kavita Bani

(Assistant Professor)

Ms Preeti Singh

The “3rd International Conference on Innovative and Advanced Technologies” (ICIATE-2019)” is focused on the future industrial aspects available for Engineering professionals in General Electronics, Electrical, Computers and Communications in particular. The Conference provides an open forum for scientists, researchers and engineers to discuss nascent innovations and research advancements in the areas of next generation electronics, computers, communication architectures, algorithms and recent trends in power systems. It will be a wonderful opportunity for delegates to gain quality input useful for their future research in this knowledge based society.

Sincerely,



Ms. Preeti Singh

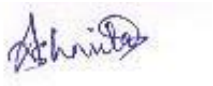
(Assistant Professor)

Ms. Ashmita Shetty

In today's world, sustainable development is crucial to meet the needs of the present without compromising the ability of future generations to meet their own needs. This is why we have chosen the theme "Digital Transformation- The World at your Fingertips" for our 3rd International conference in Atharva College of Engineering, Mumbai.

Advances Augmented reality has led to many challenging problems that require new performance evaluation tools and methods to keep up with their rapid evolution and increasing complexity. The workshop on "Augmented reality" is intended to provide an international forum for scientists, engineers and practitioners to share and exchange their experiences, discuss challenges, present original ideas, and report state-of-the-art and in-progress research results on all aspects of performance evaluation of wireless networks and mobile computing systems.

Sincerely,



Ms. Ashmita Shetty

(Assistant Professor)

Messages

From

Editorial

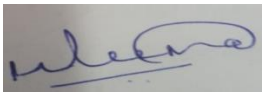
Board

Prof. Nileema Pathak
HOD, IT

The efforts taken by Shri Sunil Rane, Executive President-AGI; in the field of Science and technology has encouraged today's youth to think innovatively. On behalf of organizing team of ICIATE 2019, I would like to wish all authors, patrons, and readers a very Happy, Harmonious, and Prosperous Year 2019! Conferences have a strong zest to bring researchers together to discuss and enhance their knowledge in the respective domain. ICIATE is not just a conference but a great meet up for all the technocrats. Such meet-ups always help us to collaborate with the people of interest.

It gives me immense pleasure to write as an editor of this 3rd International conference on "Innovative and Advanced Technologies" at Atharva College of Engineering, Mumbai.

March 2019, turned out to be vibrant and zealous because of ICIATE. I am stunned and amazed by this flamboyant aura of technology and happy to see the efforts taken by the current generation and of course the diversity was something that left me awestruck. I appreciate the efforts taken by all the researchers and wish them best of luck for their future success.



Prof. Nileema Pathak
Editor – ICIATE 2019
H.O.D.
Department of Information Technology

ATHARVA
COLLEGE OF ENGINEERING

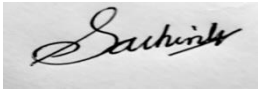
Prof. Sachin Gavhane

With the zest to support digital India and to boost Research and Development at international platform, Atharva college of engineering has organized an 3rd International Conference on "Innovative and Advanced Technologies", from 27th to 29th March 2018. It gives me immense pleasure in writing this message as an Editor of this conference.

The theme of the conference is "Digital Transformation". The proceedings of ICIATE include abstracts for oral presentations provided by enthusiastic students, practicing researchers, industry personalities and academicians. I extend my warmest thanks to the authors for their interest, enthusiasm and timely submission of research papers and participation in this mega event of more than 400 delegates.

ICIATE is a great platform for all the technocrats. The idea behind this conference was to help and motivate researchers to carry forward their work to the next level. As Editor of ICIATE 2019, I anticipate that these proceedings would be of immense value and will be definitely useful to researchers in their practice or thinking process. This collection will also offer a window for new perspectives and directions in the respective horizons.

Happy Tech 2019!!!



Prof. Sachin Gavhane
Editor – ICIATE 2019
Assistant Professor
Department of Information Technology

Members of Core Organizing committee

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Prof. Sachin Gavhane

Prof. Garima Gujar

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"INTERNATIONAL CONFERENCE ON INNOVATIVE AND ADVANCED TECHNOLOGIES IN ENGINEERING"

(ICIATE 2019)

DATE: 27th To 29th MARCH, 2019

Organized By

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COLLEGE OF ENGINEERING

AET's

ATHARVA COLLEGE OF ENGINEERING

Venue:

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Charkop Naka, Malad (West), Mumbai - 95
Tel.: 91-022-40294949 (30 Lines)
www.atharvacoe.ac.in

International Conference on Innovative & Advanced Technologies in Engineering

(ICIATE -2019)

THEME PAPER

Digitalization is most powerful driver of change and has tremendous potential to contribute to growth in various engineering sectors. With digitalization we need to think differently, it is not primarily about doing what we already do today, it is about doing things differently. The International conference at Atharva College of Engineering aims to spark discussion on the recent trends, practical issues and the solutions adopted in the field of Engineering and Technology by incorporating innovative ideas and employing advanced technologies. Scientifically, digitization is a blend of many engineering disciplines like Electrical & Electronics Engineering, Computer Science & Information technology and Sciences.

Conversion of analog information in any form to digital form with suitable electron-ic devices so that the information can be processed, stored, and transmitted through digital circuits, equipments and networks.

Information technology has been integrated everywhere. It is a vital part of making modern society function as it does. More and more products and services are produced and distributed digitally through various information networks. For the IT industry, digitization is changing the way clients are thinking about their businesses and how they can increase their competitiveness for future success. On the technology front, digitization is based on two pillars. First, a scalable cloud platform, which allows companies to start on a small scale and yet supports business growth needs. Second, secure and stable connectivity enabling the highly

networked scenarios of the Internet of Things (IoT) and Industry 4.0 at any location and with any device.

To create thirst among researchers, academicians and practitioners for the up-gradation of the knowledge, where the impact required in depth to sharpen the skills. A Workshop with the theme Digitalization in Engineering Education is arranged for professionals. This workshop focuses on both theory and applications in the broad areas of digitization in Electrical, Electronics, Electronics and Communication, Computer Science and Information Technology.

The add-on Session is arranged for Students on Augmented reality (AR). AR is an enhanced version of the real physical world which uses of visual elements, sound or other sensory stimuli. It is a growing trend among companies involved in mobile computing and business applications in particular. Amid the rise of data collection and analysis, one of AR's primary goals is to highlight specific features of the physical world. This workshop focuses mainly on applications of AR in various areas of engineering.

The industries of the Electrical, Electronics and Mechanical have done more to prepare themselves for new era of digitization in manufacturing sector. When looking at the digitisation of the economy, the Electrical and Electronic, Mechanical Industry contributes particularly with the research-intensive divisions of semiconductors, sensors or actuators, embedded software and Robotics to the further development of various countries as an industrial location.

The telecommunications industry has been critical to the process of digitization across a range of other sectors. From retailers to financial services, firms depend on telecom networks to provide customers with compelling online and mobile experiences designed to capture their interest and keep them coming back. 5G and IoT are game changers, creating new business models and roles for both operators and vendors. The models that have been in operation for the last 10 years simply will not work for the next decade. NFV (Network Function

Virtualization) and SDN (Software Defined Networking) are the main cloud-centric technological advances appearing in the market today. After a slower start than initially anticipated, the NFV/SDN market will expose moderate growth through ongoing NFV/SDN investments by major telcos (e.g. ATT, Verizon, Telefonica, China Mobile). Allied Business Intelligence (ABI) Research forecasts that the NFV market will reach $38 billion by 2022.

Digitization is driving greater innovation, helping improve service levels as well as outcomes. In healthcare, for example, patient information recorded on smart devices and stored on the cloud is helping doctors monitor patients' status remotely and improve effectiveness of critical care. Telemedicine is fast gaining acceptance in serving economically disadvantaged populations.

ICIATE'19 aims to encourage researchers to gain insight into communication systems of the future, and to develop such systems. This conference is exploring newer ideas and evolving technologies, with emerging new applications by publishing articles containing pure knowledge.

3rd International Conference on Innovative and Advanced Technologies in Engineering(ICIATE-2019) from 28th to 29th March, 2019

Pre-Conference Workshop Schedule- 27th March-2019

<table>
<tr><th colspan="3">Day-1:- 27/03/2019 (Pre-Conference Workshop)</th></tr>
<tr><th>TIME</th><th>SCHEDULE</th><th>VENUE</th></tr>
<tr><td>08:30 A.M Onwards</td><td>Registration for Workshops</td><td>Phase-I :Ground Floor</td></tr>
<tr><th colspan="3">Pre-Conference Workshops</th></tr>
<tr><td colspan="2">Workshop on
"Augmented Reality"
(For Students only)</td><td>Workshop on
"Digital Transformation in Education"
(For Professionals only)</td></tr>
<tr><td colspan="2">Time: (11:00 A.M to 04:00 P.M)
• SPEAKERS: 1
Mr. Akash Mishra
(Student, ACE)
• SPEAKERS: 2
Mr. Kunal Kasa
(Student, ACE)
• SPEAKERS: 3
Mr. Jatin Jawale
(Student, ACE)
Workshop Faculty Coordinator:-
Mr. Kishore Bhosale
Venue:(CC lab, 5th Floor)</td><td>• SPEAKERS: 1
Time: (10:30 A.M to 12:00 P.M)
Ms. Bhanu G. Tekwani
Assistant Professor,
Information Technology Department,
Vidyalankar Institute of Technology, Mumbai.
• SPEAKERS: 2
Time: (12:00 P.M to 01:30 P.M)
Mr. Tomesh Jain
Zonal Business Head
Code Tantra, Hyderabad
• SPEAKERS: 3
Time: (02:30 P.M to 04:00 P.M)
Mr. Mandar Warde
Systems Engineer,
Career Analytics,
• SPEAKERS: 4
Time: (04:00 P.M to 04:30 P.M)
Mr. Sarang Kulkarni
Assistant Professor, ACE
Introduction to Indian Institute of Remote Sensing (IIRS), ISRO
Workshop Faculty Coordinator
Prof. Neha Singh and Prof. Sangeeta Kotecha
Venue: (Presentation Hall, Fourth Floor, Phase-I)</td></tr>
</table>

3rd International Conference on Innovative and Advanced Technologies in Engineering(ICIATE-2019) from 28th to 29th March, 2019

SCHEDULE - 28th March-2019

Day-1:- 28/03/2019		
Time	**Schedule**	**Venue**
08:30 A.M Onwards	Registration for Conference (Paper/Poster)	Phase-I, Ground Floor
08:30A.M-09:30A.M	**Breakfast**	Phase- III, Ground Floor
INAUGURATION		
09:30A.M- 09:35A.M	**Lighting of Lamp**	Phase-III, 4thFloor, Seminar Hall
09:35A.M-09:50 A.M	**Welcome Address** **Dr. P. N. Nemade** Director, ACE	
09:50 A.M - 10:00A.M	**Opening Remarks By:** Prof. Karuna Nikum	
10:00A.M-10:15 A.M	**Address by Guest of Honor** **Dr. (Capt) C. M. Chitale** Professor, Department of Management Sciences (PUMBA), Pune, Maharashtra.	
10:15 A.M - 10:30 A.M	**Address by Chief Guest** ***Dr. Suresh Ukarande*** Dean, Faculty of Science & Technology, University of Mumbai	
10:30A.M- 10:45A.M	**Address by Principal, ACE** **Dr. S. P. Kallurkar**	
10:45A.M- 10:55 A.M	**Address by Executive President** ***Hon. Shri Sunil Rane*** Executive President, Atharva Group of Institutes.	
10:55 A.M – 11:00 A.M	**Vote of Thanks** Prof. Deepthi Sekhar	
11:00A.M-01:00P.M	**Discussion on** **"Trends in Education System to Enhance Corporate Connectivity"** ***Dr. (Capt) C. M. Chitale***	
01:00P.M-02:00P.M	**Lunch**	Phase-III, Ground Floor
02:00P.M-02:05P.M	**Inauguration of Poster Presentation** **By Chief Guest** ***Dr. Suresh Ukarande***	Phase-I, 4th Floor, Library
02:05 P.M - 03:30 P.M	Parallel Session of Paper/Poster Presentation	Phase-I
03:30 P.M - 03:40 P.M	**Tea Break**	
03:40 P.M - 05:00 P.M	Parallel Session of Paper/Poster Presentation	

SCHEDULE - 29th March-2019

Day-2:- 29/03/2019		
Time	**Schedule**	**Venue**
08:30 A.M Onwards	Registration for Conference(Paper/poster)	Phase-I,Ground Floor
09:00 A.M - 09:30 A.M	**Breakfast**	Phase-III,Ground Floor
09:30 A.M - 01:00 P.M	Parallel Session of Paper/Poster Presentation	Phase-I
01:00 P.M - 02:00 P.M	**Lunch**	Phase-III,Ground Floor
02:00 P.M – 02:45 P.M	**Key Note Speaker** **Dr. Aditya Abhyankar** (Dean- Faculty of Technology, Department of Technology, Pune University)	Phase-III 4th Floor, Seminar Hall
02:45 P.M - 3:30 P.M	**Key Note Speaker** **Topic:- "Digital Transformation for Industry 4.0"** **Mr. Manish K. Sharma** (Project Material Head, Mahindra & Mahindra, Mumbai)	
03:30 P.M – 04:00 P.M	**Panel Discussion** **"The World Changer Technologies: Today & Tomorrow"** *** Dr. Aditya Abhyankar (Chairman)** *** Mr. Manish K. Sharma** *** Dr. Sheetal Rathi** *** Dr. Jaganath Nirmal**	
	• **Student Representative:** **Mr. Aditya Pandey**(Student, ELEC, ACE)	
	• **Faculty Coordinators** **Prof. Garima GurjarProf. Pranav Nerurkar**	
04:00P.M–04:10P.M	**Tea Break**	Phase-III,Ground Floor
VALEDICTORY		
04:10 P.M - 04:15 P.M	**Welcome Address** Prof. Deepthi Sekhar	Phase-III, 4th Floor, Seminar Hall
04:15 P.M - 04:20 P.M	**Report of Rapporteur** Prof. Sachin Gavhane	
04:20 P.M - 04:25 P.M	**Views of Participants**	
04:25 P.M - 04:30 P.M	**Address by Guest of Honor** ***Dr. Aditya Abhyankar***	
04:30 P.M - 04:35 P.M	**Address by Chief Guest** ***Mr. Manish K. Sharma***	
04:35 P.M - 04:40 P.M	**Concluding Remarks** **Dr. S. P. Kallurkar** Principal, ACE	
04:40 P.M - 04:55 P.M	**Distribution of Prizes for Paper & Poster Presentation**	
04:55 P.M - 05:00 P.M	**Vote of Thanks** Prof. Karuna Nikum	

Paper ID: 1	**Title:** Non Static Background Modelling and Subtraction using Modified Space and Time Local Binary Pattern Technique			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Kuldeep Vayadande	Nikhil Karande	Surendra Yadav		
Abstract: Conventional background modeling and subtraction techniques have a assumption that the scenes are not of dynamic structures with restricted perturbation. These techniques will perform inadequately in dynamic scenes. In this paper, we present a resolution to this difficulty. We first expand the local binary patterns from space domain to spatio-temporal domain, and present a new dynamic texture extraction operator, named modified spatio- temporal local binary patterns (Modified Space and Time Local Binary Pattern). We present innovative and effective method for dynamic background modeling and subtraction using Modified Space and Time Local Binary Pattern. In this proposed method, each pixel is modeled as a group of Space and Time Local Binary Pattern to dynamic texture histograms which combine spatial texture and temporal motion information together. The histograms obtained are processed to get normalized histogram which is the limitation of existing Space and time local binary pattern method. Compared with traditional methods, experimental results show that this method adapts quickly to the changes of the dynamic background. It gets correct detection of moving objects and overcomes most of the false detections for dynamic changes of natural scenes.				

Paper ID: 2	**Title:** Android Application Malware Detection Using Machine Learning			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Charul Bari	Vinay Hariyani	Sanjay Bagora	Sanjay Gavane	
Abstract: Mobile devices have seen an exponential increase in the demand and its usage in recent years and this has made information access easy as well as vulnerable. Sensitive and critical information can be accessed by malicious applications using voluntary permission controls. It is necessary to develop an efficient and adaptable solution as signature-based antivirus solutions are ineffective due to high false detection rates. Android targeted malware has increased dramatically in recent years, and the focus of malware attackers towards the Android system has been much greater than other mobile operating systems. To address the problem of malware detection, we have proposed a machine learning-based malware detection system for Android platform. The system utilizes the features of collected random samples of benign and malware apps to train the classifiers.				

Paper ID: 3	**Title:**JUST WALK OUT : An innovation towards the fusion of the online and offline markets.			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Shrusti Talati	ShrutikaMallya	Gayatri Pednekar	Dr. mamta Meena	
Abstract: An ever emerging trend and development of digital technology have become a prime reason leading to the drift of the potential users from the offline to the online markets. This paper proposes to bring in a change in the way people shop adding in the advantages of both, an online and an offline market and promoting the O2O business strategy. The users of the system will be able to carry out multiple tasks like adding items to the smart cart, operating the cart manually, mobile payments and a quick bill generation while avoiding the long queues at the billing desk and experiencing a hassle-free shopping. A mobile application along with the use of NFC(Near Field Communication) makes this process handy for the end-user. Various modules like the web module, user android application, and physical interaction with the items in the market have been closely discussed to define an inter-connectivity and suffice the needs of the user to make it a whole new experience of a Smart Shopping System for the end-user.				

Paper ID: 4	**Title:** Crop Yield Prediction Using Supervised Machine Learning Algorithm			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Hardik Joshi	Monika Gawade	Manasvi Ganu	Priya Porwal	

Abstract: Agriculture is considered as the main and the foremost culture practiced in India. Nowadays, some farmers don't have awareness about the crop which will give them good production. They usually plan the cultivation process based on their experiences. But due to the lack of precise knowledge about cultivation, they may end up cultivating undesirable crops which will not give them an expected production rate. Hence, some of the farmers choose the suicide over it for paying off the loan which is not the right solution for it. There is an invention of new technologies like ML, IOT, AR but it's not getting used properly in the agricultural field. So our paper proposes a software application to predict crop yield from past data. This can be done by applying a machine learning algorithm on that data. The information about the farmer's state, district, season, land area, crop type is used for the estimating production rate of crops. Thus the project focuses on the creation of a prediction model which may be used to predict the maximum production rate of the crop before sowing.

Paper ID: 5	**Title:** Augmented Reality For Education			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Samira Nigrel	Gunjan Nava	Kapil Jain	Isha Gudhka	

Abstract: Augmented Reality is the technology that has proved to bring revolution in the field of Education. It also have shown to be relevant, useful and valuable in encouraging children in various learning activities at an early age as visualizing things can be very laborious for children using traditional methods of learning. Other issues with the present teaching system involves complexity in stimulating children's learning interest, lack of teaching situation and poor study effectiveness. In this paper we are aiming to develop an Android based Mobile Application using Augmented Reality for kids. Our idea is to make learning interactive, simplify learning process as well as ease the burden on children. This work mainly considers Pre-School children and presents an approach with associated AR cards with a purpose of providing a playful approach towards learning of alphabets and numbers.

Paper ID: 6	**Title:** Algorithm for Trustworthiness in E-commerce Services			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Hardik Shah	Kushal Sanwalka	Nikhil Sheth	SejalD'Mello	

Abstract: Due to new technologies emerging in order to detect fraud and ill feedbacks and scores in online services, Trust Reputation Systems (TRS) provides robust support to parties who need to take the right decision in any e-commerce or electronic transaction. TRS has to trustfully calculate the most trustworthy score for a particular product or service. In fact, based on demonstrations, TRS gives the most trustworthy and calculates the most reputed results in the implement system. Thus, TRS must rely on strong, reliable architecture and suitable algorithms that are able to select, save, generate and classify scores and feedbacks. In this work, our team is proposing a new architecture for TRS in e-commerce application which includes feedbacks' analysis in its treatment of scores. In this, it compares the given results with the prefabricated statements and results that already exists. As a conclusion of this study, the reputation algorithm generated genuine trust degree of the user, trust degree of the feedback and overall better reputation score of the product or service.

Paper ID: 7	**Title:** Combating Shill Bidding in E-Commerce Websites				
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**	**Author6:**
Kuldeep Helee Rana	Harsh Mehta	Jaymeen Gandhi	Nilam Menat	SejalD'Mello	Snehal Kale

Abstract: In recent years, human cheating has grown quite drastically among the e-commerce websites. In today's competitive world where individuals' main aim is to earn big, trust becomes a big issue. Particularly in the field of online auctions, trust among random users is almost impossible to maintain. Shill bidding is a process in which a seller increases the price of a product or introduces fake bids into the auction so as to raise the price of that particular product. The architecture for detecting the fake bidders is proposed which includes monitoring of the various patterns that these bidders follow. The algorithm called as Bid Tracking will be implemented that will help us to identify the patterns and hence a make conclusion as to whether that particular user is a fake bidder or not.

Paper ID: 8	**Title:** Fake News Detection Using Stochastic Gradient Descent algorithm			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Himanshu Patil	Mayur Surve	Sanket Chavan	Samira Nigrel	

Abstract: Today the use of social media has been tremendously increased, but since there is no control over the social media there have been spread of fake news, messages like a drop of oil in water which has been proved hazardous to the humans. So the purpose is to develop a system which will classify the post or message either fake or genuine using Machine learning algorithm. Detecting Fake news is an important step. This work determines the use of machine learning techniques to detect Fake news.

Paper ID: 9	**Title:** Blockchain Framework for Cloud Based Data Security and Privacy for Insurance Processes			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
SumitaChandak	Harsh Dodia	Aaditya Jittha	Manas Karande	Urvish Gosalia

Abstract: Study has been undertaken to analyze the working of insurance industries. The insurance industry is reliant on various transactions between consumers for uniform functioning of multiple policies. The overall procedure followed by the insurance industry includes hefty amount of paper work, which is the major concern in the present scenario. We propose a distributed platform with blockchain as a system service for supporting insurance processes and settlements. Blockchain consists of data structures which are linked together inside a list. These blocks are shared among multiple nodes in the network and they are stored in a decentralized manner. Each and every block contains the timestamp, hash function of the previous block and the information of the transaction. It provides security to consumer data and credentials obtained. Making it difficult for the intruder to obtain sensitive information of the customers over the network.

Paper ID: 11	**Title:** Android Application For On-Street Parking			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Bhakti Palkar	Pranoti Nage	Namrata Prajapati	Krina Mandavia	

Abstract: In cities like Mumbai where the population is at its peak and the roads are all messed with vehicle's and long traffics. In such over increasing population it becomes a difficult job to find a parking spot for our vehicle. We came up with an idea where users can logon to our application and find the perfect parking spot which is nearest to their destination. With this the users saves both time as well as fuel. The driver can easily view the parking availability on the application and drive straight to the spot without wasting any time. Hence this is an intelligent parking system where we take into account the drivers driving time to the spot and forecast the parking availability for different parking locations based on real time parking information. Users can enter the destination where they wish to go and based on the location, the system provides various parking spots in the area. In this paper, we have proposed an idea to book a parking spot through our application and generate a receipt for the user and also reflect the vacancies in real time on the application as well as the website operated by the admin. With such a system the parking authorities can easily manage their parking spaces efficiently.

Paper ID: 12	**Title:** Hand Gesture Controlled Wheel Chair			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Shrusti Ajay Soni	Ritik Yadav	Suryanshu Mishra	Uddhav Singh	Swapna Patil

Abstract: This work introduces an automated system is to be developed to control the motor rotation of wheel chair based on head and hand movement of physically challenged person. In order to facilitate these people for their independent movement, an accelerometer device (ADXL330) based transmitter is fitted either on persons head or hand. Based on the head or hand movements the transmitter will generate command signals which will be received by receiver fitted on the back of the chair. This receiver after receiving signal will drive the motor fitted to the wheel chair. The ADXL330 is a small, thin, low power, complete 3-axis accelerometer with signal conditioned voltage outputs, all on a single monolithic IC. The wheel chair can be driven in any of the four directions i.e. left, right, forward, back. The automated wheelchair is based on simple electronic control system and the mechanical arrangement that is controlled by an Atmel 80s52 microcontroller. This automatic wheel chair also helps people who have various other disabilities to sit on the chair and just hold the accelerometer and move it over to control the vehicle movements. It also contains obstacle detection system to detect various kind of obstacle comes in the path of chair.

Paper ID: 13	Title: Image Retrieval based on Feature Similarity Score Fusion Using Motley Genetic Algorithm			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Abhijit Somnathe	Ram Reddy			

Abstract: This paper proposes an image retrieval method based on multi-feature similarity score fusion using motley genetic Algorithm and chaotic fuzzy logic. Single feature describes image content only from one point of view, which has a certain one-sided effect. Fusing multifeature similarity score is expected to improve the system's retrieval performance. In this paper, the retrieval results from colour feature, texture feature and size are analysed, and the method of fusing multi-feature similarity score is described. For the purpose of assigning the fusion weights of multi-feature similarity scores reasonably, the motley genetic algorithm using chaotic fuzzy logic is applied.

Paper ID: 14	Title: Image Encryption Using Jumbling Salting				
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**	**Author6:**
Akash Tiwari	Venkatachalam Iyer	Mayuresh Vartak	Puneet Verma	Akash Tiwari	Renukla Nagpure

Abstract: Today almost all digital services like internet communication, medical and military imaging systems, the multimedia system requires reliable security in storage as well as in the transmission of digital images. There becomes a necessity for security in digital images because of the faster growth in the fields of multimedia technology, internet and cellphones. Hence, it becomes a need for image encryption techniques in order to hide images from such attacks. In this system, we use JS (Jumbling Salting) algorithm in order to hide the image. JS algorithm is being executed in .NET framework. It provides a brand new access to assure high-level security of information as required in the fields of aerospace, military, confidential, financial and economic, national security and so on. To know the security aspect regarding images, we are devising JS algorithm. The image encryption technique forms a highly secured form of the encrypted image which makes it difficult to decrypt reducing the probability of guessing the key, since JS algorithm deals with randomization.

Paper ID: 15	Title: Skybell: A smart doorbell system using OverGrive			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Harsha Dhosewan	Gaurav Ghag	Rashmi Desai	Tanmay Devlekar	Jyoti Dange

Abstract: Home security systems is a need of every household to protect their family and valuables from potential break-ins and burglars. For this purpose, we aim to combine the functions of a smart phone and a home network system and build a simple smart doorbell using raspberry pi and overGrive. Avery apt location to mount his doorbell is at the doorstep of the house. If the doorbell is pressed, then the resident is notified via an email or SMS. Though the resident is not present, he/she will be notified about any incoming visitors. This can be proven immensely effective and beneficial for deaf people as they will get notified on their mobile phone about the presence of a visitor. To make it more advanced we have added a USB webcam that will take photos of the visitors and send it to the resident along with the email or SMS. So, if any outsider tries to break into the house the system can be used to identify the trespasser.

Paper ID: 16	Title: An Android Application for Plant Disease Detection			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Shrusti Shruti Sankhe	Sayali Parkar	Mrunali Sawant	Divya Kumawat	

Abstract: Agriculture is one of the foundations of the Indian economy. It not only contributes to GDP but also serves as a source of income for a larger chunk of the population. The farmers detect diseases based on their past experiences, which is very time consuming and require lots of expertise. Sometimes, the disease cannot be diagnosed with naked eyes. This paper uses the image processing technique for detecting the disease in plants. For feature extraction, OpenCV libraries along with SURF algorithm are used. The proposed system will identify the bacterial and fungal diseases in a plant at an early stage in a short span of time.

Paper ID: 18	**Title:** Solar Gardenbot			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Shrutika Sawant	Shriwari Shedge	Sweety Vade	Ketaki Waikul	Manoj Mishra
Abstract: In this project we have studied the importance of solar energy and converted the solar energy to electrical energy in order to drive our project,We also studied the working of wireless transmission and reception with the help of HC-12 wireless module,And studied the working of 8051 microcontroller with solar panel,battery,7805 voltage regulator, push buttons,hc-12 module,mosfetswitch,motors and L293D motor driver.Thus this make our project eco friendly,less time consuming and less human efforts.				

Paper ID: 19	**Title:** Secure3: 3 level security with IBA using cued multiple click points			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Sanjana Gosavi	Surabhi Karande	Tanvi Hirlekar	Prof. Nida Parkar	
Abstract: Today computers have become a major part of everyone's life. Use of computers is not only restricted for corporate use but also for personal use and inter communication purpose. Since tremendous use of Internet and Web Development, increasing security has always been an issue. Text based passwords are not enough to counter such problems, which is also anachronistic now. Therefore, this demands the need of something more secure as well as user friendly. Knowledge-based authentication and text-based authentication system have some major drawbacks which are renowned. Users mostly choose such passwords which are easy to remember and passwords which are predictable enough for the hackers to guess it. The major threats for such security system are Shoulder-surfing attack, Tempest attack, Brute force attack. Using 3 Level Security framework these threats can be ended easily. These 3 levels involve the Textual Password, One Time Password (OTP) and Image Based Authentication with Cued Multiple Clicks point.				

Paper ID: 20	**Title:** Current Problem and Mitigation Techniques: An Overview			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Karuna Nikum	Abhay Wagh	Rakesh Saxena		
Abstract: In this paper, an attempt to overview a various number of mitigation techniques and power quality problems associated with neutral current for commercial loads are discussed. The load connected to three phase four wire system are generally single-phase loads and generate triplen harmonic currents due to unbalancing in phases in neutral. There are various neutral current mitigation techniques including active and passive has been discussed. The existing approach and a framework of references for researchers in this field are provided.				

Paper ID: 21	**Title:** Study of Augmented Reality Residence System			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Kasturi Kolambkar	Yugandha More	TejalMusale	Mahendra Patil	
Abstract: Today Augmented reality is based on reanimating virtual objects into real world. It is a combination of real and virtual environment. Augmented reality gives a vivid representation of the object and thus provides an immense experience to the user. ARCore, a google platform, facilitates creation of augmented reality application. It has a vast range of applications. It also shows its applications in real estate. This paper explicitly analyzes and evaluates the current status, challenges and development directed towards digital marketing in real estate. Augmented reality enhances user experience apart from visualization of apartment and visiting each site personally by incorporating 3D models of apartment and furnishing options thus augmenting instructions onto the user's device in real time. The main objective is to provide an accurate, stable and a complete system which in turn appears to be interactive from user perspective. It has the value similar to marketing method and it is used to encourage clients into conversations and purchase.				

Paper ID: 22	**Title:** Solar Hybrid Bicycle			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Ajinkya Trimukhe	Muthukumar Nadar	Sahil Kanchan	Fahed Shaikh	

Abstract: : Fuel prices in India and around the world increases day by day, so there is a great need to look for an alternative to conserve these natural resources. Promoting the use of hybrid vehicles can reduce CO2 emissions and fuel costs. Therefore, a solar bicycle is an electric vehicle that offers an alternative to using solar energy to charge the battery, and therefore provide the voltage required to run the engine. The hybrid bike combines the use of solar energy, as well as the dynamo that runs through the pedal to charge the battery to run the bicycle. The bicycle has the most viable solar/electric power generation system mounted on the vehicle to charge the battery during all durations. This multiple-load vehicle can be loaded with both solar and mechanical energy. The solar panels can be mounted on the back of the bicycle to capture the sun's rays. When there is no sun, mechanical work acts as an auxiliary energy source. To control the speed of the engine, an accelerator is provided that controls the supply. This type of technique involves reducing the operating cost and increasing the efficiency of the vehicle's operation. The speed of the hybrid solar bicycle can reach up to 10-15 km/h carrying a load of a person of average weight.

Paper ID: 23	**Title:** Multipurpose Student Smart Card			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Prof Nilesh Gode	Rinky Yadav	Rutuja Kadam	Mayank Vyas	Viraj Kolekar

Abstract: Smart cards have been around for a while now, it has institutes and makes use of the current 'Digital India' movement. There is a need for students to carry a separate identification card and a different library card while all this could be combined into one single card with the entire detailed information of an individual student is stored in that particular card. This student card system can be usable in the educational, retail sector. The smart card will he used as means for identification and cash. From there we can see the potential and power of smart describes the overall versatility, practicality and usability.

Paper ID: 24	**Title:** Warfare Robot			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Prof. Manoj Mishra	Sushmita Shivalkar	Swapnali Patil	Geeta Yadav	Sakshi Dale

Abstract: These robot used in military are usually employed with the integrated system, including video screens, sensors, gripper and cameras. Android application controlled WARFARE ROBOT, built in with Robotic arm mechanism to pick up or place small objects (like explosives), an on board Wireless video camera, Infrared based surface depth and irregularities perception and android application for movement and other controls of the Robot. The robot will serve as an appropriate gadget for the defense sector to reduce the loss of human life.

Paper ID: 26	**Title:** Foldo E-Cyk			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Saieshsingh Hansbhaday	Rushikesh Sonawane	Sujay Paul	Neelay Sinha	Pragya Jain

Abstract: Imagine a futuristic world with flying cars and flying people, of course with jet packs. Now, this a fine vision for development, but development is not an egg that just hatches one day it is like a child that grows slowly. In this ever-growing, ever-developing world, one does not think much about the other side of the coin. Progress, today, is synonymous with the deterioration of our environment. As most of the vehicles in the present world are petroleum fuel based, the only alternative to these remains the cheapest and simplest vehicle of all, a Cycle. In today' s fast running world a bicycle may seem like a snail' s sprint machine, but electric cycles have changed the scenario, leading to the incorporation of electric systems in cycles and thus increasing the speed at the output. A solution has also come to the compaction factor in the form of folding cycles. Our project aims at folding an electric cycle. Although such projects have been made earlier, our project is trying to incorporate a self-charging system in an electric, folding cycle.

Paper ID: 27	**Title:** Robotic Prosthesis With Brainwave Control			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Amit Parab	Viraj Parab	Mohit Naik	Mishal Roy	Dr.Bhavin Shah

Abstract: This application is developed to bring NGO's and people together for social development using a common platform. In today's modern world, mobile connectivity is an important aspect in all fields around us. There is communication gap between the man who wants to do some good for society and Non-Governmental Organization. Fortunately, the technology of hand-held devices are used to solved many problems nowadays. This platform majorly serves a common Platform for collaboration among Non-Government organizations and every other common man. This system will also ensure safe and trusted use of donations by organizations and maintaining transparency in its operations.

Paper ID: 28	**Title:** Android App As A Common Platform For Multiple Types Of Donation			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Roopa Anugandula	Prachi Chari	Reshma Burungale	Shweta Sharma	

Abstract: The field of Robotics is growing fast in order to make people's life efficient and easy. There different kinds of machines designed and produced in this specific field to aid the specially abled people facing issues like poor vision, broken legs or arms, body part dislocation etc. Thus, to surmount the given issue, we are producing a robotic arm so as to increase its utility for the people in the mentioned category. The project targets to construct a Robotic Arm which shall be operated straight by human brainwaves. These brainwaves will be discerned by using EEG (Electroencephalogram) technology. People who are specially abled are the prime focii behind the project. They can make use of the robot arm in order to take control over various actions which are impossible for them.

Paper ID: 29	**Title:** Android Application Development for Convenient Blood Donation			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Roopa Anugandula	Prachi Chari	Reshma Burungale		

Abstract: Blood cannot be manufactured, it's a God gift. People usually use social networking sites for requesting blood. As there is an advancement in technology and the use of cell phones is widespread, so it's better to take advantage of this and build something for social welfare. There are systems developed but have some limitations. They cannot say whether a person is fit for donating blood. The proposed system is an android based application for blood donation in which donors will create an account and add several details such as name, contact number, blood group, address, etc., which will be stored in the Firebase backend. One that needs blood can apply for it through the application. Blood banks and hospitals will also have an account if a blood bank or hospital falls of blood shortages or in case of emergency they can apply for blood. A request is sent to all other available donors who are nearby. The person who accepts the request first will donate it. The donors which are present in the contact list will be highlighted. The person who has donated blood will not be visible in the list for the next 3 months.

Paper ID: 30	**Title:** Vehicle Trading &Recommendation System using Apriori algorithm			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Swaraj Chavan	Sandeep Bhosle	Sharif Biradar		

Abstract: The number of vehicles and its uses are increasing day-by-day. For easy life every person requires vehicle. But in today's world of internet, there are many e-commerce websites for advertising used vehicles for sale or rent, but there is none that checks history of vehicles and then only lists it for the buyers. This opens a way for frauds to cheat with customer. It could cost customer money and time. To overcome the drawback, we came up with idea of developing a system that verifies the vehicle is safe to trade or Not and then recommend it to the customer with a recommendation system that recommends vehicle based on frequently viewed basis. This system is very Easy and convenient to use with risk free environment for trading used vehicles. It can be useful for data mining to recommend vehicles to customer. Therefore, this proposed system is Simplifying the process of Buy/Sell/Rent for used vehicles and to solve all issues related to vehicles we are developing a User-Friendly system that focuses on Buying, Selling & Renting process for used vehicles and provides a Fraud-Resistant environment and Recommending best possible choices using a recommendation system. This system is designed to reduce any chances of fraud as well as it protects dealer's & customer's privacy details using recommendation system. It also provides accurate information of vehicles and it acts as a medium for trade between a customer and a used vehicle dealer.

Paper ID: 31	**Title:** Vehicle pooling and Ride-sharing System			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Varun Nair	Darshan Maheshwari	Sanman Munj	Tanvi Kapdi	
Abstract: Vehicle pooling, also known as ride-sharing is the sharing of car journeys so that more than one person travels in a vehicle, and prevents the need for others to have to drive to a location themselves. By having more people using one vehicle, vehicle pooling reduces each person's travel costs such as: fuel costs, tolls, and the stress of driving. Vehicle Pooling is also an environmentally friendly and sustainable way to travel as sharing journeys reduce air pollution, carbon-emission, traffic congestion on the roads, and the need for parking spaces. Ride sharing is a good way to use up the full seating capacity of the car, thus increasing the number of High Occupancy Vehicle (HOV) which could otherwise remain unused if it were just the driver using the car.				

Paper ID: 32	**Title:**Sign language prediction using Machine Learning			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Rudra Palande	Vivek Bafana	Omkar Dukhande	Priya Porwal	
Abstract: A real time sign language is important in facilitating communication between deaf people and general people. Machine learning relies on recognition of a pattern in data and the concept that computers can learn without being programmed by programmers to perform certain specific tasks; researchers in artificial intelligence wanted to see if it was possible to teach computers to learn from data and to improve upon it. Using Neural Network and Machine Learning algorithms application can convert the sign language and also help in predicting the next letter which we make use of daily. This paper is a brief review of a machine learning application which is Sign Language Prediction.				

Paper ID: 33	**Title:** IoT based automated security solution for women safety			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Shruti Kumar	Pratiksha Mohod	Shweta Khot	Prof. Smita Patil	
Abstract: In today's era of women empowerment most of the articles in the newspaper covers the achievements of women but we owe the responsibility to introspect that equal or more than the same number of news are the ones of rape, sexual abuse, sexual harassment etc. Where is our society heading towards? A society which strives for empowerment of women and suppresses its safety or the one which strives for both? In every developed country the maneuver for women safety arised much before women empowerment. This paper focuses on mainly three phases. The most important part of the system is the collection of data which is analysed on firebase to provide an alert message regarding the safety of a particular location before visiting the same location. The system also consist of a prototype of an IoT device which a women can trigger by pressing a button which will automate the application through Bluetooth. Various security features is provided to the victim through the application. The system takes proper care to see all possible measures taken to provide help to the victim in a distressed situation.				

Paper ID: 34	**Title:** RANSOMWARE:-UPRAISAL FOR BITCOIN			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Shubham Chachan	NairutiSanghav			
Abstract: On 12 May 2017, a massive ransomware attack occurred across a wide range of sectors, including health care, government, telecommunications and gas. To date, Wanna-Cry has spread to over 300,000 systems in over 150 countries. The countries that appear to be the most affected are Russia and China, probably because of the high percentage of legacy software, with significant impacts elsewhere, notably to the UK National Health Service. The spread of the ransomware reportedly slowed in the two days following the launch of the attack, in part due to the discovery of a "kill switch" in its code. However, there are reports of new variants of the malware (such as) which do not have this kill switch. Data on new variants is unconfirmed and limited at the moment, EY publish updates as more information becomes available.				

Paper ID: 35	**Title:** Solid-State Unipolar Marx Generator For Water Treatment Process			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Tejas Ambekar	Vaishnavi Hejmady	Ashwin Nayak	Dhaivat Patil	Garima Gurjar

Abstract: Marx Generator can generate a high voltage pulse from low voltage dc supply using identical stages that operate at a fraction of the total output voltage. They are used in high energy physics experiments, as well as to simulate the effects of lighting on power line gear and aviation equipment. Each stage includes a capacitor or pulse forming network and a high voltage switch. Typically, these switches are spark gaps resulting in Impulse Generator with low repetition rates and limited lifetimes. The development of economical, compact, high voltage, high di/dt and fast turn-on solid state switches made it easy to build economical, long lifetime, high voltage Impulse Generators capable of high pulse repetition rates. It is a clever way of charging a number of capacitors in parallel, then discharging them in series. Pulse Electric Field (PEF) can be effectively used in water treatment applications. In this Paper, High Voltage Imrjarpulse Generator is presented for treating water via application of PEF.

Paper ID: 36	**Title:** A Plastic Extrusion Machine			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Twinkle Mishra	Ankita Mote	Advait Patil	Anmol Shinde	Garima G

Abstract: This machine is concerned with recycling of waste plastic by method of Extrusion. This is done by melting of plastic with the help of barrel and screw. Plastic extrusion machine utilizes the waste plastics such as PET, HDPE etc., and converts them into something effective such as plastic lumber, plastic granulates, filament, etc. In this project, PID controller is used for Temperature control of barrel in which the plastic is melted. Solid State Relay is used as a switch which responds to the input signal by PID controller. J-type Thermocouple is used for temperature sensing. This circuit is build and tested on Polyethylene terephthalate (PET).

Paper ID: 37	**Title:** Vortex Bladeless Wind Generator			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Omkar Ambetkar	Siddesh Bhosale	Sagar Cherphale	Tatya Sargar	Pragya Jain

Abstract: Today, India is amongst the list of developing countries in terms of economic development. Hence the energy requirement is going to increase manifold in the coming decades. To meet these energy requirements, coal cannot be the primary source of energy. This is because coal is depleting very fast. So to meet these energy requirements non-renewable energy sources should be used excessively. India is having fifth largest installed wind power capacity in the world. As the area required for installation of conventional windmill is high, bladeless windmill based on vortex induced vibrations can provide the solution for these disadvantages of the conventional windmill. The Bladeless Windmill is such a concept which works on the phenomenon of vortex shedding to capture the energy produced. Generally, structures are designed to minimize vortex induced vibrations in order to minimize mechanical failures. But here, we try to increase the vibrations in order to convert vortex induced vibrations into electricity.

Paper ID: 38	**Title:** PCB Design Machine			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Nikita Patil	Sayali Patyane	Shraddha Padaye	Bhagyashree Redkar	Akanksha Bhargava

Abstract: Printed circuit board (PCB) is the most essential part of every electronic instrument that we use in daily life be it on any industrial or student level. The machines used in industries for production of PCBs are costly and bulky. In consideration with the Computer Numerical Control (CNC) machine technology used in today's world, we aim to construct portable and cost efficient PCB design machine. This machine automatically draws circuit on the PCB as well as drills it with ease.

Paper ID: 39	**Title:** NRF24L01 Transceiver Based Hand Gesture Controlled Robotic Arm Replication			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Milan Trivedi	Darshan Pangare	Ranjan Rao	Kajal Yadav	Dr.Bhavin Shah

Abstract: Robotics is the most influential field in technology. Use of robots is exponentially growing in every industry. A gesture controlled robotic arm is proposed in this paper. The structure of the arm comprises of four fingers, a thumb, a rotating arm, and an elbow. Bend sensors also known as flex sensors are used to control the movements of the fingers and accelerometers for the movement of the arm and the elbow respectively. The arm is controlled wirelessly using transceivers. The movements of the fingers are controlled by cables that act as cords of the human arm. The interface between hardware and software is achieved using ATmega microcontrollers.

Paper ID: 40	**Title:**Solar wave hybrid generation			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Ranjit Jadhav	Bhavik Gore	Saurabh Madkaika	Sahil Phathak	

Abstract: This paper presents a brief overview about the design, benefits, risk, and environmental impact of a sea wave power plant. The intention of this accomplishment is to serve society without hampering environmental ecology. This task is based on the renewable sea wave energy. Burning fossil fuel causes global warming. Again wastes of nuclear power plant are very hazardous. Accident of this plant yields great turn of human lives. The power generation from seawave has growth a huge potentiality. The price of fossil fuel is rising day by day because of its scarcity in nature. As the operating cost of sea wave power plant is low and uses a renewable source of energy, it is possible to produce power at low price. Existing hydrostatic power plant needs dam. This is very harmful for environmental ecology and lives diversity. But this proposed plant does not require any dam or any other hazardous construction and this also reduces the installation cost. However it is reliable, sustainable, environmentally friendly power extraction procedure from sea wave Also the solar pv cell is connected to the wave power apparatus so that it can harness power through the sun As the efficiency of solar pv cell is high in cold weather conditions it is a very good source of energy in hybrid along with wave energy.

Paper ID: 41	**Title:** Emergency Alert By Shaking Mobile Through Mobile App			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Mayuri Kashid	Archana Karete	Sonali More	Deepali Maste	

Abstract: Every morning while reading newspaper, surely we get news related to rape, women harassment. The question arise in our mind really women are safe in their day-to-day life? In light of recent outrage in Delhi which shocked the nation and woke up to safety issue for our daughter. We focus on proposed model that can be used to deal with problem of security, issue of women using Global Positioning System (GPS) technology to provide women safety on their android mobile phones. After seventy years of independence day , when women will feel secure and safe then only that will be great achievement for us. Now a days because of high rating of rape and abusement there is need to take action or precautions before we get big news of it. There is an urgent need to understand and solve the problem of safety of women.

Paper ID: 42	**Title:** Supermarket Online Shopping With Routing Suggestion			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Divya Shah	Drashti Sheth	Samidha Kurle		

Abstract: The ever increasing population is a huge burden on the society leading to overcrowding at most of the places, resulting into wastage of time. Majority of shopping time is wasted in standing in long queues for payment and finding the products. With the increasing popularity and adaptability of smartphones, the purpose of the paper is to propose the solution to the problem with the use of scanning technology embedded in the smart phones and find the product location for the item list to be bought. Dijkstra's Algorithm, A* Algorithm can be used to find the product location.

Paper ID: 43	**Title:** Zero voltage switching operation of a Boost converter			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Suraj Bharadwaj Tripathy	Sangeeta Kotecha	Priyanka Tripathi		

Abstract: The power converters are known as one of the most widely used in any electrical applications. However, design of a power converter taking inductor current ripple into existence is one of the major concerns while designing a boost converter. A huge inductor ripple current may destroy the entire circuit resulting a huge amount of losses. Hence, a topology should be adopted to minimize the over current in a power converter circuit because of the inductive element. A gate switching drive in case of a boost converter results induction over current which cause excessive switching loss. In this paper a zero voltage switching topology is designed which allows the MOSFET to switch on whenever it senses a zero voltage. Thus the switching losses can be minimized.

Paper ID: 44	**Title:** CNC Router			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Tanmay Shinde	Akshay Rahate	Ashish Yadav	Rohit Salvi	Prof. Mahalaxmi Palinje

Abstract: Computer numerical control is basically a conversion of designs produced by computer aided design into numbers. This machine is mainly used for engraving, cutting and drilling on materials such as wood, metal, acrylic and PCB objects. The idea behind this machine is that it should be cheap and reduce the working complexity. For running the machine we use GRBL which is an open source and runs on Arduino UNO. It has a work area of 270 × 430 × 100 mm (X, Y, Z) which is reasonably a good working space. The use of Arduino UNO makes this machine cost efficient without limiting the features and overall performance along with high accuracy of design.

Paper ID: 45	**Title:** Cost Effective And Automatic Robotic Arm Wiper For Solar Panel Cleaning			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Swapnil Acharekar	Nived Bhoir	Vedant Dalvi	Lerson D'Souza	Sangeeta Kotecha

Abstract: For the efficient functioning of any solar panel, one of the most important factor is that it should be dust free and free from various other foreign particles like bird droppings, dirt, soil, etc. Hence, the project that we intend to undertake is the "Cost Effective and Automatic Robotic Arm Wiper for Solar Panel Cleaning" which is focused on automatic cleaning of the solar panels. In most substations, the process of removing the dust and cleaning is done manually which is tedious. The project consists of a robotic arm which will detect the overall area of the panel and will clean the entire panel working surface. The project is intended for not restricting the cleaning of just one panel but also automatically move to the successive panels which are connected in the grid. This will ensure that the work takes place with minimum effort of the user. Another advantage is that the unit will be smaller in size and independent as compared to the existing set-ups which are usually fixed and complex and require multiple units for optimum operation. The arm will make use of the energy from a DC source based on the application.

Paper ID: 46	**Title:** Spectrum Sensing Based On Cognitive Radio Networks			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Vikrant Yadav	Vijay Bhutiya	Ritesh Panda	Mohd Umar	Prof. Nilesh Gode

Abstract: In wireless communication we deal with new emerging technologies. There is lack of radio spectrum because of large number of applications. Thus, spectrum utilization is very important issue nowadays. In order to utilize the radio spectrum and increase the efficiency of the wireless communication system we need to design a compact system. Cognitive radio is used to improve the efficiency of radio spectrum resources. The aim of this project is used to create software used for spectrum sensing. It uses MATLAB software for coding of various spectrum sensing techniques. The software consists of following spectrum sensing techniques like Transmitter detection and interference based sensing.

Paper ID: 47	**Title:** BLDC Motor Control Using PID Controller			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Manasi Bhalekar,	Umer Khan,	Saad Mukhi,	Dipti Nagare,	Rashmi Chaugule
Abstract: This paper presents the technique to control the Brushless DC (BLDC) motor using a PID controller. PID controller can reduce settling time and steady-state error. To check the capability of BLDC motor, a peak response schedule to observe the capability of a motor, but without the use of PID a high peak overshoot obtain which results in an increase of settling time, so with the help of PID peak overshoot can minimize and settling time will reduce. To rotate the BLDC motor, the stator winding should energize in a sequence. It is important to know the rotor position to understand which winding will energize following the sequence. So to obtain the rotor position a hall effect sensor is used. The control of BLDC motor has done using MATLAB.				

Paper ID: 48	**Title:** Advanced Shoe Cleaning Machine			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Poonam Bhave,	Sonali Dole,	Dakshata Kamble,	Shraddha Mhatre	Suvarna More
Abstract: In this work, it is proposed to design a complete shoe care machine, incorporating shoe dust cleaning, & shoe polishing facility with this machine. All the employees, faculty, travelers, guests, nurses, etc. are required to wear clean shoes before entering their laboratories, offices, workshops, luxurious rooms, factories as these places require high maintenance of cleaned floors and surfaces, and the air inside the facilities should be very clean. Thus, complete shoe care machine is designed, considering all the above parameters with respect to customers need in terms, portability and also economically available to them at cheaper price, thus providing not only clean environment but also provide the style quotient to the person with polishing effect.				

Paper ID: 49	**Title:** Autonomous Swarm Robots For Industrial And Disaster Mitigation Application Using Wireless Communication And Swarm Intelligence			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Kinjal Jayesh Patel	Swarnima Sunil Bhosale,	Shivani Yashvantrao Desai	Prachi Ganpat Kate	Dr.Bhavin Shah
Abstract: Contemporarily in analysis swarm artificial intelligence is associate degree flowering division underneath artificial intelligence. The nomenclature swarm intelligence is sparked from, nature swarm where swarm means a group. It consists of a master bot controlling multiple slave bots. In this paper, a brief idea about the branch of swarm robotics and their application in industrial and disaster management has been brought out. It is based on swarm intelligence and wireless communication, bearing coordination, synchronization and obstacle avoidance.				

Paper ID: 50	**Title:** Fabrication of BLDC motor			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Shubham Parkar	Bidhyut Choudhury	Pavan Naik	Pushkal Prasad	
Abstract: During the course of the project, we have made a model that is easy to modify and fast running which simplifies the work to an extent. In this project we have discuss an algorithm to fabricate BLDC motor. Various components of BLDC motor are modified for efficient application. The comparison between BLDC motor and brushed motor is shown and the reason why BLDC motor is more favourable. On course of the project this motor is to be tested for the high efficiency as the BLDC motor is the ideal choice for the application that requires high reliability, high power-to-volume ratio. This BLDC motor will act as a cost-effective replacement for brushed dc motor.				

Paper ID: 51	**Title:** Patient Health Monitoring System Using IoT			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Bhavya Mehta	Aman Mehta	Manthan Joshi	Sharad Gohil	
Abstract: This project is based on Internet of Things (IoT) which aims to provide real time health monitoring for such people with ease and better facilities. This system measures Body temperature, Pulse rate, Pulse oximetry (SpO2) and Electrocardiogram (ECG) using respective sensors which are interfaced with controller Arduino Uno. These sensor readings are sent wirelessly to the cloud over the internet using ESP8266. ThingSpeak, IOTGeek, etc. are various IoT cloud platforms available on which the readings are displayed, visualized and stored securely. In this way, medical records are stored digitally and is easily accessed and analysed by the patient and the doctor remotely from any part of the world regardless of place, time and device. SMS/Mail alerts containing the patient information and location will be sent to the doctor during any critical condition.				

Paper ID: 52	**Title:** ANDROID Sensor Based Traffic Signal And Control System			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Rachana Upadhaya	Margesh Patil	Kaustubh Pagare	Samidha Kurle	
Abstract: One of the major problems faced in any metro city is traffic congestion. Getting Stranded in between heavy traffic is a headache for each and every person driving the vehicle and even to the traffic police in controlling the traffic. One of the oldest ways of handling traffic was having a traffic policeman deployed at each junction and manually controls the inflow of traffic through hand signaling. However, this was quite cumbersome and then came the need for a Traffic Signal Management and Control.				

Paper ID: 53	**Title:** Modeling and simulation of static var compensator			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Sanskruti Belnekar	Pooja Chaurasiya	Dhiraj Ingale	Alok Kumar Shukla	Karuna Nikum
Abstract: This paper presents the modelling and simulation of Static VAR Compensator (SVC) in the power system. A compact algorithm based on power analysis for reactive power compensation as well as load balancing through the SVC in single phase and three phase, three wire for star connected load and delta conneced SVC.In addition, the power factor can be improved simultaneously by selecting an appropriate amount VAR to the system.The structure of SVC used for this paper is thyristor controlled reactor with fixed capacitor (TCR-FC).				

Paper ID: 54	**Title:**Electromagnetic probes; Direct Photon and dileptons in heavy ion collisions			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Abhilasha Saini	Dr. Sudhir Bhardwaj	Dr. Bright Keswani	Dr. Ajit Somani,	Dr. P.N. Nemade
Abstract: The available enthralling corroboration indicates the creation of a non-confined plasmonic phase when the heavy ions undergo collision at sublimated energies whether at relativistic heavy ion collider or at large hadron collider. The electromagnetic probes, which comparatively possess longer mean-free-path than that of plasmonic system's magnitude. Consequently they could be decamped to set foot on detectors getting into least interaction to system and potentially impart information regarding preliminary plasmonic phases. Here the photonic and dileptonic-outflow is inspected along with experimental data analysis.				

Paper ID: 55	**Title:** Employee Time Management System			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Shabina Sayed	Mehvish Mulla	Harshada Nikam	Zainab Pipulyawala	

Abstract: An Esteemed organization has thousands of Employees working in different departments and every department has different teams separated based on their work categories(eg: In IT department we have designing team, developing team, database creation team, etc) All these employees record their daily basis work data in excel sheets, mails, laptop, notepads, etc. Additionally, the Managers may be contacting with the employees under them on a range of different platforms – phone, email and social media. Asking for reports, following up on projects This is a web application that provides an automated and centralized method of tracking and monitoring work time for active projects by enabling managers to track employees work time, efforts spent while working on various projects performing tasks assigned to them, also leave can be recorded. This system helps in completing projects on-time by providing real-time project status. Also it optimizes resources utilization and measure the performance and productivity. The project is being developed by using ASP .NET framework in C# programming language and a back-end technology of Standard SQL Server. Without this application, it can be difficult to extract required information for time analysis, hard to generate reports, Managers can lose sight of what their team are up to in reality, which means that they can't offer the right support at the right time – while a lack of oversight can also result in a lack of accountability from the team.

Paper ID: 56	**Title:** Radar Helmet for Soldiers			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Rakshanda Kadam	Mayuri Kothaval	Madhura Ghane	Prof. Jyoti Mali	

Abstract: Soldiers are very essential part of any nation's security system. During, wars and search operations soldiers get injured and some of them go missing. As we all know soldier's health is important because they are the savior of our country who protects us from terrorist attacks and from many suspicious activities which can harm us and our nation too. This paper will give an ability to track the location and monitor health of the soldiers in real time which goes missing at battlefield. It will minimize the time and rescue operation efforts of army control unit. It will help the army base station to track the location and monitor health of soldiers using GPS module and sensor such as temperature sensor, heart beat sensor, etc. The data coming from sensors and GPS receiver is transmitted wirelessly using Zigbee module having the range of 10 to 100m. A soldier can ask for help from control room using a panic switch and we have also used RADAR which will alert the soldier using vibrator within the range of 3cm to 4m.

Paper ID: 57	**Title:** Voice Based Automated Transport Enquiry System with GPS Enabled Tracking			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Amol Masal	Chetak Dhandar	Pratik Neve	Santosh Dodamani	

Abstract: In this era of modern science there are many developments happening in the field of information technology just to ease the human efforts, engineers are working on various software projects for different purpose. Differentiating our project title name our system will take input in the form of voice or speech and will work accordingly as per the input given by the user and by processing the queries regarding transportation of bus in the back end, our system will display the result. It will be helpful for the user to get the response of his transportation queries effortless.

Paper ID: 58	**Title:**Decentralized way of Identity Management using Blockchain Technology			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Siddhesh More	Kaustubh Nehete	Aditya Manjrekar	Amruta Pokhare	
Abstract: Digital identity is one of the important aspect of digital economy. However, proving one's identity remotely is not that much easy. Centralized models of Identity Management are currently facing various challenges due to increasing number of data breaches which is causing loss of users data and privacy. Use of Blockchain Technology can help us to solve these issues. Blockchain Technology has revolutionized the entire mechanism of storing and maintaining the digital identity online. Also it helps to use digital identity globally as a legal identity proof or document. The main objective of this research is to find out solutions for current centralized identity management systems by the help of Blockchain Technology. The paper also includes a study of currently used systems for a better understanding of the technology.				

Paper ID: 59	**Title:** Remote Voting System Using Biometrics			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Umang Gangar	Madhavi Shripuram	Snehal Jadhav	Priyanka Sharma	
Abstract: In India, elections are conducted using EVMs and VVPAT machines requiring a high amount of manpower. A public election system constitutes the foundation of a democracy where people elect their leader. Remote Voting System for India, based on biometrics with the help of AADHAAR is proposed for the first time in this paper. The proposed model is an attempt to eradicate false votes. This will help to manage the elections easily and more securely. In this model, it requires less physical infrastructure and human efforts. Remote Voting System is a way that assists the voter to vote for his/her favorite candidate from any of the polling booths irrespective of the allotted booth. The additional feature is that it reduces paperwork for the electoral roll. The tallying and the counting of the votes are done automatically, thus saving a huge amount of time for the Election Commission to declare the results.				

Paper ID: 60	**Title:** WI-FI Authentication Method Using Authcoin			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Akshay Kumbhar	Narendra Gupta	Sourav Mandal	Amruta Pokhare	
Abstract: Nowadays free Wi-Fi hotspot is everywhere available, and it gives access to user after authenticating by the One time password (OTP) send on the user Mobile number. But OTP method of authentication is not so secure as many attacks can be performed to identify user OTP. For this we propose a new method of authentication using Authcoin that use blockchain to store the data which provide more security to the user credentials.				

Paper ID: 61	**Title:** Smart Piezo City			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Pranay Mendhe	Vicky Gupta	Daniya Soparker	Yusra Wangde	Jyoti Dange
Abstract: This work describes the recent advancements in piezoelectric energy harvesting concepts for smart city applications. Several works have been reported which discussed the detailed design and use of different piezoelectric materials to harvest energy from vibration. In the smart city context there are many opportunities to convert mechanical to electrical such as human motion, sounds, machines and streets. Researchers have studied the factors that affect the amount of the output generated power from various sources to determine its efficiency. Effect of harvester structure, material that is used in fabricating the harvester mobility of human in its location, and other factors have been studied. Efficiency of piezoelectric harvesters is an essential parameter to judge the performance of the prototype for the betterment of energy resources.				

Paper ID: 62	**Title:**Travel Mate			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Deeksha Gupta	Mayuri Meshram	Bhakti Manjrekar	Mahesh Lokhande	Akanksha Bhargava

Abstract: Travelmate is a freedom load carrying system that keeps associate degree acceptable following distance behind the owner by permitting absolute freedom of movement. The aim is to modify the act of trucking baggage that is usually encountered whereas finding the tedious and sometimes thorough going routines. it's accustomed studies the whole style associate degreed operation of robotic baggage bag from the electronic perspective and to form an increased operating model of suit case integrated with sensors supported by a system able to execute obstacle turning away and target following behavior that makes the look presentably distinctive. to create associate degree autonomous baggage carrying device that follows the operator wirelessly we have a tendency to describe the conception of building a mechanism able to pursue a selected person through an airfield whereas helping with carrying that person's baggage. when area unit read of this device out there for acting these tasks, we have a tendency to delineate our approach that aims to develop a platform that would send and receive a proof that may offer an easy and sensible suggests that for the mechanism to see a path and follow it that doesn't need the employment of internal maps and also the ability to self-localize.

Paper ID: 63	**Title:**Hybrid Cryptography Using Artificial Neural Network			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Satish Yadav	Gaurav Sancheti	Rohan Shinde	Shravan Singh	Prof.Jyoti Mali

Abstract: The main objective of this work is to explore the problem: the use of artificial neural networks for the retransmission of the encoding of images of large satellites. The central accreditation uses fixed and arbitrary keys in the learning process, such as classical symmetric and asymmetric coding. The network used is NxMxN neurons, hidden levels and output. The network is being trained to regulate the weight and the bias receives a fixed value from 0 to 1 after normalization. Is biased is determined. The supply capacity between the input layer and the hidden layer, the layer acts as the first key (K1), while the bias is partial, the hidden layer and the outer layer represent the second key (K2). The course method uses K1, K2, or both, and is done by using small-sized images to improve speed. Then, the network is used to encode and resolve images from normal satellites. Many tests prepared several satellite, optical and SAR images, and so on, the content between decoding (quality of decryption), good quality images and decoding were at least 98% of images that the network has not been previously trained to decode. They also found that the network does not affect the distortion of the geometric image, such as translation, size and rotation.

Paper ID: 64	**Title:**Survey on: Benefits of Augmented Reality in Education - Advantages and Challenges			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Mahendra Patil	Mamta Meena	Nikita Patil		

Abstract: To enhance the analytical thinking, problem solving skills and programming skills of undergraduate engineering students by using Augmented Reality. The effect of activity enhances the thinking power of students. This paper addresses this advantages and challenge using Augmented Reality as a collaborative learning tool to develop programming efficiency and evaluation of the learners. To overcome the problem faced by learners in teaching learning we have done some surveys. The overall results prove that there is drastic change in programming ability of learners.

Paper ID: 65	**Title:**Camera based Action Detection using Artificial Intelligence			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Shraddha Pandit	Shraddha Aher	Chinmayee Kudtarkar	Sayali Patil	

Abstract: Human action recognition, based on video inputs, has become one of the most renowned research areas in the fields of computer vision, and pattern recognition. It has wide variety of applications such as surveillance, robotics, health care, video streaming and human-computer interaction. In our project, we are going to use it for surveillance purpose. Here, we are using the system to monitor real-time events taking place at the same venue. The main objective of our system is to detect different actions using Artificial Intelligence. An immediate action will be taken by the system itself so as to reduce human interference. Particularly, Recurrent Neural Networks (RNNs) are used to represent the track features. The attended features are then processed using other RNN for event detection/classification.

Paper ID: 66	**Title:**Kinetic Energy Recovery System			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Prathamesh Kulkarni	Yohan Mistry	Chirag Dave	Chinmay Pandya	

Abstract: KERS is one of the applications of regenerative braking. Regenerative Braking converts some of the waste heat energy produced during braking into more useful form of energy with the help of MGU (Motor Generator Unit). The system stores the energy in a battery (after applying brakes) produced under breaking in a reservoir and then releases the stored energy under acceleration. The key purpose of the introduction is to significantly reuse the wasted energy in some application of cars. KERS is introduced to improve fuel efficiency of the engine. KERS is one of the applications of regenerative braking. Regenerative Braking converts some of the waste heat energy produced during braking into more useful form of energy with the help of MGU (Motor Generator Unit). The system stores the energy in a battery (after applying brakes) produced under breaking in a reservoir and then releases the stored energy under acceleration. The key purpose of the introduction is to significantly reuse the wasted energy in some application of cars. KERS is introduced to improve fuel efficiency of the engine.

Paper ID: 67	**Title:**Comparative Analysis of Harmonic Filter on the Basis of Power Quality Parameters			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Rohan Patil	Aniket Patil	Bhushan Pangam	Rohansing Girase	Karuna Nikum

Abstract: Today with the advancement in power electronic domain, the majority of the loads are non-linear in nature. All these kinds of load give rise to the harmonics, which in turn can affect the power quality of the system. To filter out these unwanted harmonics there are various practices carried out through passive, active and hybrid solutions. The choice of the filters depends according to the loads and their requirement. As per necessity, active and passive filters are preferred to fulfill the power quality requirement as per IEEE-519 standard. In this paper, a prototype of single-phase and three-phase passive filter has been proposed.

Paper ID: 68	**Title:**Weighing Transmitter By Using Ethernet Modbus/TCP			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Shweta Mishra	Bablu Gupta	Rohit Katkar	Dharmendra Gupta	

Abstract: As we know that weighing processes is very important part of any process industry. For transmitting the weighing information from the factory to plant control system (PLC/SCADA/DCS) now day's we are using either Analog signals (0-10Vdc/4-20mA) or Digital communication protocols like Ether CAT /PROFINET/Modbus RTU etc. by interface through the RS485/RS232/CAN/etc. So in this project we try to do something new. Approximately we all are aware the Ethernet which is dominantly accepted by the people for high speed communication. Ethernet globally free that's why it is fast gaining popularity in the shop floor with different device being introduce by vendors .Basically our project based on Ethernet but we are providing Modbus facility also because we won't know which industry use our product, it may be large industry which uses Ethernet completely or moderate industry which is use Ethernet as well as Modbus protocol also or it could be a small industry which is not use Ethernet it is totally dependent on Modbus RTU. So finally the aim of this project is to combine both technology Ethernet and Modbus TCP based weighing transmitter for getting good speed and ease of Ethernet by interfacing to the factory and automation industry.

Paper ID: 69	**Title:**Human-Computer Interface For People With Disabilities			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Rohit Bhoye	Shyam Chendekar	Kunal Churi		

Abstract: An economical head operated mouse for individuals with disabilities. It focuses on the top operated mouse that employs one tilt sensing element placed within the telephone receiver to work out head position and to operate as straightforward head operated computer mouse. The system uses measuring system based mostly tilt sensing element to detect the user's head tilt so as to direct the mouse movement on the computer screen. Clicking of mouse is activated by the user's eye brow movement through a sensing element. The keyboard operate is meant to permit the user to scroll letters with head tilt and with eye brow movement because the choice mechanism. Voice recognition section is additionally gift within the head section to identify the little letters that area unit pronounced by the unfit user.

Paper ID: 70	**Title:**Power Theft Detection Using Gsm Module			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Gauri Salunkhe	Prasad Chavan	Harshad Chormare	Tejas Koli	Kaustubh Gharat
Abstract: This paper introduces a discovery of energy theft in every house and in trade for varied ways for theft. voltage is crucial for normal day to day existence and spine for the business. Power is undisciplined to our daily existence with increasing want of power the ability theft is likewise increasing, management theft is a difficulty that keeps on plaguing power section crosswise over entire nation the goal of this endeavor is to stipulate such a framework which is able to plan to reduce the illicit utilization of power and moreover decrease the percentages of theft. This task can naturally acknowledge the theft. This model decreases manual management work and plan to accomplish theft management.				

Paper ID: 71	**Title:**Review on the Applications of Graphene			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Ekta Kamble,	Furqaan Makba	Samiullah Shaikh	Sanchita Sutar	Priti Singh
Abstract: Graphene is one of the world's most thinnest, strongest and highly conductive material of heat and electricity and it has many potential future applications. The research related to these applications are being carried out from past many years and it still has a lot more scope of research even now. We have studied and summarized different applications of Graphene ranging from electricity generation in thermo-electric generators, electronic/photonic circuits, solar cells, biomedical applications in this paper.				

Paper ID: 72	**Title:** Medicine Alert System For Elderly Patient			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Dr.Swati Jha	Nikita More	Jagruti Rathod	Sayali Mane	
Abstract: In present days all of us are living in modern society and are full of pressure from all kinds of environment every day. With the changing dining habits, people are prone to many chronic diseases [1]. Most chronic diseases like Alzheimer, diabetes etc. need special care from nursing staff to remind the patient, when to have the correct medicine. Patients usually forget to punctually have medicine once they leave the hospital and reach their homes. This situation of neglecting or forgetting to have medicine according to doctor's instruction often causes many un-fortunate deaths of patients. The research work done on this study includes a medicine box as the main part of product which includes GSM module, voice module, control panel displaying all information related to the patient, medicine detecting mechanism, and a microcontroller to operate the monitoring function. Microcontroller in patient medicine box is responsible for scanning the condition of sensor that detects the status whether the medicine was had by patient on time or not. A message sent to the patient and another family member those numbers is save in GSM module, if patient is not present at home or don't take medicine at prescribed time.				

Paper ID: 73	**Title:**Design Of Touch Less Hand Gesture Recognition System			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Lalchandra Gaund	Nilesh Naik	Snehal Narute	Anita Mahajan	Supriya Mandhare
Abstract: In today's modern world, everything is digitized where different means of interacting with digital devices are gaining popularity and importance. This project is intended to perform various tasks on mobile using app such as capture an image, snapshot, media controls using hand gestures. It is an interface that augments the real world around us with digital information. It takes input through webcam and processes the frames of images through image processing tools and perform actions which are pre-defined or can be user-defined. Our approach consists of three different steps that are hand localization, hand gesture tracking and spotting. The hand location procedure tracks the candidate hand regions on the basics of skin color and motion. The algorithm find the centroids of the moving hand regions and detect a unique gesture interface to perform certain actions.				

Paper ID: 74	**Title:** IoT Based Garbage Collection System			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Sahil Sawant,	Suresh Solanki	Vallabh Sardesai	Mukesh Kumar Mishra	
Abstract: Waste management has always been a major issue for all the developing countries around the world. Often, in our society we come across overloaded and unattended garbage bins. It not only makes that place look ugly but also leads to unhygienic conditions resulting into widespread of diseases and foul smell in the vicinity. Also, the health and safety of the labour involved in the garbage collection process is ignored. It is our insufficient and irresponsible waste management system to be blamed for. In order to avoid such situation and to provide a smarter and more reliable alternative, we have come up with an interesting project called 'IoT Based Garbage Collection System'. Our project not only deals with the present waste management problems efficiently but also requires minimum human assistance. It consists of a Smart Garbage Bin and a Garbage Collecting Robot Vehicle. In the Smart Bin, we have used an ultrasonic sensor which constantly monitors the level of garbage and displays the status on the server using a Wi-Fi module, once the Bin gets full. In response to this, the controller can use the Robot Vehicle to reach the location of the Smart Bin and collect the garbage from it. The controller can control the Robot Vehicle over Bluetooth using an Android application.				

Paper ID: 75	**Title:** : Sixth Sense Technology			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Aniket Mehtar	Jyoti Kumbhar			
Abstract: In the present wherever nearly everything is digitized, completely different suggests that of interacting with the digital devices are gaining vast quality and importance. This is due to the advancements of technologies that modified the concept that interacting with the technology is restricted to dial pads, keyboards, mouse, and touchscreens. This project is intended to perform various tasks on computer such as capture an image, play audio, open MS PowerPoint and work with it etc. with the assistance of gesture recognition and image process principles solely with the assistance of colored sensors(caps/LEDs) worn on the fingers of the user. It is a gestural interface that augments the physical world around us with digital information and lets us use our natural hand gestures with colored sensors to interact with that information. This technology paves a path for enormous applications. This technique allows human interaction with computers in an exceedingly a lot of direct method while not victimization any external interfacing devices. It can provide a much better alternative to a text user interface and graphical user interface to interact with the computer.				

Paper ID: 76	**Title:**Literature Review on acquisition of neurocognitive signals using BCI technology			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Abhimanyu Chaurasiya	Chalcy Nadar	Zankhana Pandya	Jyoti Kolap	
Abstract: In all of the emerging technologies, the newest ones are the brain controlled devices that are entering the market. Devices which operate on the commands issued by brain are a boon for medical patients who suffer from paralysis and such diseases. Brain being a hub of neurons communicating with the help of electrical impulses. These impulses, called brain signals can be sensed on specific spots on the scalp of a human. The technology developed to study the brain signals and use them intuitively is commonly known as BCI (Brain Computer Interface). This paper is intended to give an outline of the technology developed and its applications.				

Paper ID: 77	**Title:**Android Controlled Wildlife Observation Robot			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Vidhi Ruparelia	Aditya Mhadye,	Rajan Singh	Aditya Savani	

Abstract: Wildlife observers need to get a close footage of wild animals by getting into their habitats. Well it is not always safe to get close to all wild animals. So, for this purpose we put forward this wildlife observation robot with night vision capability. This robot can be operated wirelessly by users using just their android phones. The robot also has a wireless camera that sends footage stream wirelessly to the user PC. So, wildlife observers can safely get close footage of wild animals by operating this robotic vehicle from a safe distance. This system consists of an Arduino uno microcontroller unit used for processing user sent commands. These commands are received by the system through a Bluetooth modem. The microcontroller then processes this data and passes on signals to driver motors. The driver motors now in turn operate the motors by providing desired signal outputs to drive the vehicle movement motors. Also, when the microcontroller receives the camera directional change signal through Bluetooth modem, it then forwards this signal to the camera motor to achieve desired camera angle. Thus, this wildlife observation robot allows for safe wildlife observation using an android device control.

Paper ID: 78	**Title:**Sentimental Analysis For Customer Care Performance			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Mayuri Deherkar	Pradnya Borde	Janvi Modi		

Abstract: The size of data is increasing rapidly day by day. Almost all type of industries, organizations, and business store their data electronically. A huge amount of data is flowing over the internet. Traditional data mining tools are not capable to handle textual data as it requires time and effort to extract information. In this research we are going to transliterate audio call recordings in order to detect emotions of the speakers. Our work originally involves calls from call centres, but can have applications in other areas. We detail our overall methodology and results for speech to text conversion, text classification and text clustering.

Paper ID: 79	**Title:**Recommender System for Smart Agriculture using IoT			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Prathmesh Shirshivkar	Mayur Solaskar	Sameer Sawant	Ramesh Borkar	Smita Patil

Abstract: Recommender system is defined as system which recommend the most suitable schemes, product or service to particular farmer based on related information about the farmer and data collected from sensors. e.g .Kisan seva , Krishi mantra , etc. The recommender system will provide the agricultural information about fertilizers, soil, climate, crop rotation, various government schemes and helping hand for business and solve the problems such as lack of information, advancement in technology. The farmer can able to grow the number of crops in their field by using this information. The system will suggest helpful information to farmer to improve the agriculture production. This can be an IoT system with app using Arduino with sensors. REST API architecture will be useful to build client/server network applications. The user can access information through application. The system will help farmers to gain advance information about agriculture and increase their crop yields.

Paper ID: 80	**Title:**Electric Bike			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Ranna Sheth	Pratik Jain	Nilesh Patil	Urval Mistry	Priyanka Sharma

Abstract: Since, there is a growing demand for the use of domestic vehicles and the world is facing crisis for petroleum to drive them, thus, this project draws light on the above problem and comes with a solution of replacing the current internal combustion trend by electric drives. The main objective of this project is to implement the electric drive technology concept for two-wheeler by proposing a control strategy and the benefits of all electric range and fuel economy improvements. The work also focuses on the investigation to evaluate the energy requirements, its mass and initial cost of the battery pack for daily average travel needs of electric drive two-wheelers in India. This project also investigated the influence of driving cycle and all-electric range on battery parameters. The current project will make city commute much convenient. E-bike represents natural progression in the development of urban transportation. It will serve as a turning point since it will minimize the pollution and the running expenses. The increasing prices of fossil fuel will provide a gateway to the E-bike use and thus reducing pollution i.e. Global Warming.

Paper ID: 81	**Title:** Wireless Autonomous Aerial Swarm Robots For Industrial And Disaster Mitigation Application Using Swarm Intelligence			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Kinjal Jayesh Patel	Swarnima Sunil Bhosale	Shivani Yashvantrao Desai	Prachi Ganpat Kate	Dr.Bhavin Shah
Abstract: The paper projects the concept of the primary decentralized multi-robot slave flock that performs constant autonomous outside flight with one commanding master robot. By decentralized and autonomous we tend to mean that everyone member plots a route themselves supported the active data received from the master robot within the section. Collaborative activities originated from the localized management structure with biologically enthused from physical modeling of animal swarms. The mechanism of swarms is piloted by swarm intelligence ideology. It has applications in the surveillance area, military and defense tasks global Warming.				

Paper ID: 82	**Title:** Wireless Vehicle with Animatronic Hand			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Akshay Shenoy,	Darshan Sawant	Prathamesh Vengurlekar	Vedant Vartak	Prof Nilesh Gode
Abstract: Animatronics is a subject which deals with mechatronics, which is a composition of mechanics and electronics. In this Project we have implemented an animatronic hand which is mounted on a RF vehicle. The finger movement of the arm is based on the principle of animation whereas the elbow movement requires mechanics. We have developed the arm using the nRF24L01 and Arduino UNO. nRF24L01 is based on 2.4GHz band which ensures swift and effortless wireless communication. The main objective of this paper is to highlight the use of wireless communication and its application through the development of Animatronic Hand, which can be used in many fields such as the medical, defense and chemical industries.				

Paper ID: 83	**Title:** Transformer Health Monitoring System using IOT Technology			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Hemangi Patil	Swapnil Rode	Shubham Ghag	Nandkishor Gupta	
Abstract: Transformer Health Monitoring System using IOT Technology				

Paper ID: 84	**Title:** Invoicing And Accounting Portal For Small Ventures			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Akash Chaudhary	Jenil Boda	Aakash Tripathi		
Abstract: This prototype is to ease out the work load of a single person handling the business, one needs a software that can generate invoices and maintain the accounts of the suppliers and the customers. The license of most of the billing software are too costly and it might not be affordable to such small ventures as there are lot of risk in their business. A billing software should be user friendly such that just a glance of interface can make them understand how to use the system. Small ventures cannot invest too much behind employers thus there should be portal or software that can perform work of more people.				

Paper ID: 85	**Title:** Atharva Search Engine			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Vinaykumar Devadiga	Yashasvi Bhuva	Shreejith Nair	Aryak Dubey	
Abstract: Generally, we have observed that most of the College website doesn't include information regarding the projects undertaken by the students as well as papers published by them.We found that its one of the most important requirement for students to take new projects. Even on Atharva College web portal there are data available about the study program, but it is really hard and time wasting for a student to find the data that is needed. For easier information viewing, there is a need for a dynamic web application. ASE is implemented in some programming languages and using open source technologies. They support installation on Windows and Linux environments. XAMPP is required for the development. A login system will be implemented to separate the users (Guests, Students, Faculty). Atharva Search Engine will provide papers presented in Atharva of minimum past 2 years including projects done in the college. Papers will be divided according to domain and it will be easily available for new students. For increasing the interactivity of parents with the website there would be an AI chatbot system and a mail notification system for college program notices.				

Paper ID: 86	**Title:** Smart Bin			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Prayag Desai	Shweta Bhale	Shubham Ambokar	Jyoti Kolap	

Abstract: As people are getting smarter so should even things. The thought of smarter cities is required for smart waste management. The Project Iot Garbage Monitoring system is very innovative system which will help to keep cities clean. The idea of smart bin is for school, societies, hospitals and bus stand. It is a thought of upgrading normal bin to sensors and logics. A new ides of implementation which makes a normal dustbin to smart using ultrasonic sensors for garbage level detection and sensing message to user updating the status. The message tells the user the garbage level. This system helps to keep the city clean by informing about the garbage levels of the bins.
GARBAGE MANAGEMENT is Sorting, Transporting, Processing, Reusing or eliminating and monitoring garbage materials. Garbage management is very crucial and it has become one the major issues due to high population density. Poor garbage collection and improper transportation facility are answerable for earnings of garbage at all spots and points of city. Due to these unavailable facilities, municipal garbage management is getting critical. Improper garbage management further leads to incurable disease to living organisms. In order to overcome the above problems smart garbage management is needed.

Paper ID: 87	**Title:** Intelligent Defence RC machine			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Yasmeen Khan	Akash Gupta	Rahul Jaiswal	Sanjay Sahani	Manjiri Gogate

Abstract: The military forces tried to use new arms and weapons for reducing the risk of their lives and to save their nation from terrorism. With the advancement in technology, it mostly depends on the high tech weapons or machinery being used. Robotics is one of the trending fields of modern age in which the nations are focusing on making use of military forces in war and to maintain peace worldwide. Here in this project we aim on designing a remote controlled robot using RF which can be used by soldiers at the war field. This will reduce the risk of losing their lives. The robot will have live video surveillance by which it can record the data of its surrounding in real time. Live warnings can also be given by the soldier with the help of audio system. The robot will have the shooting mechanism through which it can shoot the enemy approaching towards it. The soldier will be able to aim by looking in live video through the laser placed in robot which is also movable by 360° in horizontal direction and 90° in vertical direction along with gun and camera. Speed of robot can be varied by varying the PWM signal so that the input voltage of DC motors can vary. A switch will be present to turn the light on and off if necessary. This project will therefore be used for military purposes and hence it will result in forming a strong part of army for our country.

Paper ID: 88	**Title:** Solar Oxygen Tree			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Vihangi Kothari	Aditya Bandiwadekar	Pooja Mistry	Kishor Aparadh	

Abstract: Urbanization and Industrialization are a main impetus for a nation's advancement. Industrialization requires space. This occurs at the cost of deforestation, contamination, corruption of nature and living beings. We need to discover elective approaches to satisfy the demands. One of the conceivable answers to maintain a strategic distance from these issues is the usage of a framework that utilizes an inexhaustible wellspring of vitality to fill diverse needs. This venture therefore aims at developing a system called “Artificial Solar Oxygen Tree”. It fundamentally utilizes an electrolysis pack to create oxygen artificially. The energy to the kit is provided by PV Modules that convert solar radiation into electricity which is used for the decomposition of water into Hydrogen and Oxygen. Oxygen is released in the air. LCD is used to show temperature, dampness, battery level, notices, etc. To make these various aspects work, we have used a microcontroller as it is a device that is capable of handling the entire system altogether. Various conditions are controlled by microcontroller according to the system demands. Energy required is obtained through PV modules and a rechargeable battery which is used to store the energy.

Paper ID: 89	**Title:** Arduino based virtual reality glove			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Kamaljeet Kaur Matharu	Archana Khandagle	Meenakshi Dubey		

Abstract: The sense gloves resemble like a glove into which the users slide their own hand, while also fastening attachments to their fingers. “so basically, sense gloves enable touch in virtual reality”. The main aim of this project is to perform a particular task by just waving our hands in front of our computer. Also, the other thing which these gloves will enable the user is the switching action on a led. The glove is designed for use in Virtual Reality systems and is integrated into a suite of applications and we can simply wave our hand in front of the computer and move the pointer to the desired location and perform some task. These gloves can improve and enhance the way of learning, also useful in medical knowledge and military training. The sense gloves are a remarkable advancement over the typical controllers bundled which may track the movement of the user's hands but don't offer any real sense of touch beyond rumbling. Due to the precise sensor-based tracking of each joint in the hand every interaction using the Sense Glove renders a virtual reality to feel like a physical environment.

Paper ID: 90	**Title:** Solar Oxygen Tree			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Roshan Bhuvad	Madhav Pai	Akshay Shinde	Kashish Parmar,	Disha Bhosle

Abstract: 3D printing is a kind of direct manufacturing technology and is called rapid prototyping, based on digital model files which can make almost any shape of 3D entities. There is no doubt that 3D printing will bring a revolutionary impact on manufacturing. The aim is to create a state-of-art machine controlled by a computer and capable of producing a 3D solid representation of a CAD model in plastic form through an extruder. Fused Deposition Modeling (FDM) used here is an additive manufacturing technology for printing 3D objects layer by layer. The main purpose of the research is to develop a low-cost 3D printer using easily available materials and layer by layer methods for fabrication which can be used to print objects confined within 300 x 300 x 300 (in mm) printing area.

Paper ID: 91	**Title:**Artificial Intelligence In Personal Health Monitoring			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Purna Raul	Purvesh Desai	Dhvani Patel	Tushar Chittikappil	Mahalaxmi Palinje

Abstract: The main emphasis of health monitoring system is to accurately identify the current state. In Artificial intelligence (AI) the machine learning algorithm gives further guidelines and tips for success to increases the survival rates. During the treatment of patient, it is important to monitor the physiological signals of the patient. While data storage is another major challenges, designing technical solutions that can be smoothly implemented and stored daily data of patient , the solution is proposed a software based health monitoring system. Physiological signals which includes heart rate, temperature etc are important signals and they are captured by using sensors. The data which is given as an input is in raw form and it is converted into digital form. Digitally stored file is compare with live data. Then the change in large or small scale it will detect and the compared result data will be stored in graphical form. Which helps doctor to analyses patient’s data and the result will also be display on device of patient along with the precautionary measures to avoid major incident. Also AI can find patterns in the treatment process to guide doctor in better caring for patient by looking into outcome and data from past treatments.

Paper ID: 92	**Title:**Wireless Bridge Monitoring System using MEMS Sensor			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Abhijit Kambli	Abhiraj Bhongle	Sahil Sheikh	Shweta Pandare	

Abstract: The project aims at providing an unobtrusive continuous monitoring system for bridges. Wireless transmission of collected sensor data is carried out. MEMS Sensors are used to monitor the changes in the parameters to be measured. Micro-controller based system that can be run at low power levels. Expandable as needed to suit the application. Facilities to measure gravitational force, rotation and temperature. Alert capabilities built into the system. Can be modified for longer range. Can display, log, and graph sensor data.

Paper ID: 93	**Title:**Smart Mirror			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Prof. Gauri Salunke	Himanshu Sakat,	Srusthi Pancha	Kaushik Nagwekar	Mandar Vaidya
Abstract: A smart mirror combines the uses of a traditional mirror with a digital aspect to bring up-to-date information to the user directly on the mirror surface. For the most part this information is simple like time, weather, calendar, and news; however there are almost endless possibilities to what can be programmed on a smart mirror. Smart mirrors are not commercially available right now so many members of the DIY community have taken on the challenge of building their own. There are four main components of a smart mirror: the frame, two-way mirror, computer screen, and a computer.				

Paper ID: 94	**Title:**Garbage Monitoring and Segregation System			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Ajinkya Potdar	Hemant Ludbe	Ajinkya Gokhale	Rahul Singh	Mohan Kumar
Abstract: In the recent decades, Urbanization has enhanced enormously. At the same half there is a rise in waste production. Waste management has been a significant issue to be thought of. throughout this paper, bin is built on a microcontroller primarily based platform. Arduino are programmed in such approach that when the bin is being stuffed, the remaining height from the sting height are reaching to be displayed. Once the rubbish reaches the sting level breathed sensor will trigger the GSM equipment that is in a position to continuously alert the required authority until the rubbish at intervals the bin is press. waste are managed with efficiency as a result of it avoids spare lumping of wastes on margin. The live of waste is best accomplished once it's separate. This project proposes to term problems. This would possibly even segregate the dry waste and the wet waste at the house level. the quantity of the rubbish collected at intervals the instrumentality is monitored victimization ultraviolet device. This is typically monitored at the system work. Adding to it, a zonal house around the margin garbage instrumentality is made victimization the load device thought, to watch if garbage spills out of the instrumentality.				

Paper ID: 95	**Title:**Web Based Real Estate Management System			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Ankit Kore	Mangesh Walve	Sonu Prasad	Bhavna Arora	
Abstract: Previously when we wanted to purchase a property there were limited choices as process was not online. The property dealing procedure consisted of many steps like finding agent, appoint correct meeting time, location and so on. It was time consuming process. We required a system which was reliable, efficient, user-friendly and simple.There are existing websites but problem with them is user has to choose from huge number of properties available on them. Existing websites hang and are slow as properties from all over India are present on it. It is better to make a website for a particular region and make all properties of that region available on it.				

Paper ID: 96	**Title:**Automatic waste management system			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Sujata Pisal	Namrata Shownkeen	Shital Tupe		
Abstract: Nowadays, waste management is one of the key concerns on which a lot of hard earned money is spent every year. Rapid increase in population has led to improper waste management which has resulted in spreading of diseases. The main issue in waste management is waste collection and waste sorting. Lack of care and attention has lead to overflowing garbage bins and poor sanitary management. Disposal of wastes is commonly done by dumping or by burning. All these methods have varying degrees of negative environmental and health risks if wastes are improperly disposed or stored. To tackle this problem, we propose the Automatic waste management system in this paper. In the proposed system, 'Automatic Waste Management System' can ease these major issues and will have two major functionalities. First, improvising current waste collection system so that the hazards of waste accumulation and costs in collection process are minimized. Second, prevents spilling of the waste all over the roads maintaining cleanliness. In these bins use RFID tags for tracking of the wastes linked with a web-based online system and a host server is responsible for calculating the points based on the amount of waste added in the bin and adding them in users virtual/e-wallet. It checks and analyses the fullness of dustbins and updates the status on the municipal server for getting instant services, so that a clean and fresh environment is maintained.				

Paper ID: 97	**Title:**Smart phone operated advance irrigation vehicle			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Kedar Prabhu	Akash Gupta	Haris Quazi	Abhishek Mishra	
Abstract: Agricultural Robot or agribot is a robot deployed for agricultural purposes. Irrigation robot, driverless tractor / sprayer, and agrorobots are designed to replace human labour. In most cases, a lot of factors have to be considered (e.g., the size and color of the crops to be picked) before the commencement of a task. Robots can be used for other horticultural tasks such as pruning, weeding, spraying and monitoring. Robots can also be used in livestock applications (livestock robotics) such as automatic milking, washing and castrating. Robots like these have many benefits for the agricultural industry, including a higher quality of fresh produce, lower production costs, and a smaller need for manual labour. Our robotic vehicle is an agricultural machine of a considerable power. This multipurpose system gives an advanced method to seed sowing, ploughing, watering the crops and harvesting with minimum man power and labour making it an efficient vehicle. The machine will cultivate the farm by considering particular rows and specific columns at fixed distance depending on crop. Moreover the vehicle can be controlled through Bluetooth medium using an Android smart phone. The whole process calculation, processing, monitoring are designed with motors and interfaced with Microcontroller.				

Paper ID: 98	**Title:**Thermal analysis of Polymer and nano-particle dispersed Liquid Crystals mixtures			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Dr. Jyoti Rupendra Amare	Dr. Santosh Mani	Jessy P. J.		
Abstract: The thermal behavior of mixtures formed by ferroelectric nanopowder, monomer, and nematic liquid crystal (LC) were investigated by Differential Scanning Calorimetry (DSC) and phase identified by Polarizing Microscopy (PMS). The DSC and PMS result clearly indicates that synthesized mixtures produced display liquid crystalline properties. The phase transition temperature (PTT) values obtained in DSC experiment are in line with the PMS observations. Investigation of thermal properties of mixture reveals that nematic range of synthesized mixtures is affected in a ways that is dependent different in attached moieties to the chain length on both the mixtures ratio and furthermore, the phase transition temperature values of ternary mixtures increases with increasing heating rate.				

Paper ID: 99	**Title:**Design and Implementation of Weather Monitoring System Using Internet of Things (IOT).			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Shikha Malik	Suraj Gupta	Naushad Khan	Rishab Raina	
Abstract: The system nominated in this paper is a modern solution for monitoring weather conditions in a certain location and make information found anywhere in the world. The proficiency behind this is Internet of Things (IoT). This is a modern and competent solution for connecting the things to the Internet. The equipment deals with monitoring the environmental conditions as well as controlling conditions like temperature, humidity, light intensity, CO level with the use of sensors and send the monitored and recorded information to the web page and plot the sensor data as graphical statistics. The data updated can be accessible on internet from any part of the world as the data can be viewed globally.				

Paper ID: 100	**Title:** Survey Of Alcohol Detection With Engine Locking System			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Akshay Thombare	Kruttika Sawant	Kinjal Patel	Ditixa Vyas	
Abstract: This prototype system is developed in a way to make the driving much safer than before. This system is developed using the alcohol sensor with the alcohol-detection mechanism. The Arduino plays a crucial role of instructing the components to do its respected work. Once alcohol is sensed the buzzer beeps indicating the value of alcohol being exceeded. The LCD display will showcase the required information. As the alcohol is detected the sound as well as display gets completed, then Arduino microcontroller now communicates to the relay switch through server for ignition of the motor that acts as an engine of the vehicle. GSM module will notify the victim's natives as well as the owner of the vehicle. GPS module will send the current location to reduce the heavy workload of police.				

Paper ID: 101	**Title:**Military Medibot			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Yash Ghori	Sonu Kushwaha	Parag Parab	Bholaram Muni	Mohan kumar
Abstract: Military and piece of ground areas that primarily need the progressive technologies that may offer sensible service in varied aspects, and robotic systems are one in all the key solutions for such necessities. Time may be a important issue once handling troopers United Nations agency expertise a unforeseen medical service that sadly may lead to death because of unavailability of the emergency treatment. Therefore, an on the spot treatment exploitation remote emergency medi-kit in military areas should be administered to the victim at intervals some minutes when collapsing wherever doctors couldn't offer service. Hence, we've designed and developed the medi-kit providing automaton, that brings on associate degree during a unforeseen event of medical service and facilitates varied modes of operation from manual to voice steering functioning to save lots of someone's lives in military areas. The humps and potholes over the manner are detected and controlled by the larva remotely. The voice steering are transmitted exploitation RF signals once necessary.				

Paper ID: 102	**Title:** Preparation of Papers for International Journal of Engineering Research and Applications			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Mr. Rupesh Singh	Mr. Manojkumar Mourya	Mr. Abhay Singh	Mr. Ashwin Yadav	
Abstract: Green Energy Generation Through Rotatory Motion system is one of the supporting step to produce green and clean energy. This system converts the rotational motion of rotatory body(Fan). This system can store energy in a storage battery and can be given to the body whenever required. The major feature of the introduction is to significantly make use of the rotatory motion in many applications of industries, houseing, and many more. This system is used to improve and to maintain balance in ecosystem to reduce usage of fossil fuel. This will allow to use renewable energy rather than natural limited sources				

Paper ID: 103	**Title:** Industrial Parameters Monitoring System			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Apoorv Pandey	Jatin Mhatre	Avinash Chaudhry	Abhijit Somnathe	
Abstract: This project is established from IoT. The principle behind this project is to be able to construct a control system which effectively does the job of monitoring industrial parameters making the use of IoT. It aims to monitor temperature, pressure and humidity of an industrial environment. IoT or internet of things is a tool which has extensive use in today's technological era. It is made by clubbing communication & embedded systems which are then used for potent transmission and reception of data. Using IoT different systems can implement industry standard protocols. By this system small scale industries can monitor their plants wirelessly through devices such as mobiles and tablets. From the mode of this paper we aspire to summarize IoT's importance which does handy monitoring of small scale industrial applications.				

Paper ID: 104	**Title:**Designing Underwater Drone/Robot Using Fish Symmetry & Replication for Outer Structure & System Control for Efficient Underwater Environment Exploration & Surveillance			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Dr. Bhavin Shah	Prof. Nilesh Gode	Prof. Manoj Mishra	Prof. Kunal Shriwas	Prof. Mohan Kumar
Abstract: The proposed paper focuses on design of underwater drone/robot which can be self controlled or operated manually with the help of Tx/Rx Module. The design focuses on use of Electroactive Polymer material & a fish like structural design which gives the underwater drone/robot improved acceleration with minimum water resistance & therefore high efficiency. The Pressure Sensor senses the pressure on the body of the underwater drone/robot & is thus giving appropriate values to computation control for adjusting the depth of the drone. Furthermore, the actuators are used for gripping a object beneath waves.				

Paper ID: 105	**Title:**Machine Translation For Regional Language			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Priya Gour	Shubham Yadav	Paras Tank	Abhishek Vishwakarma	
Abstract: The aim of the project is to reduce the communication gap between the one who is good in one language while the other one has some difficulties about the language. In this work, we provide our efforts to develop a rule-based translation system, which analyzes the translation and generate source language. Due to the wide gap (Hindi following SOV and SVO English word order) in order to find the two languages of words, re-ordering of the words is to be carried out. As a result of the above drawbacks of the approach outlined, we shifted statistical methods to develop a system. Natural Language Processing is a technique to minimize communication barrier amongst the humans. As each model has its pros and cons, we propose an approach where we try to capture the advantages of each system, thereby developing a better MT system. We then incorporate semantic information in phrasebased machine translation using monolingual corpus where the system learns semantically meaningful representations.				

Paper ID: 106	**Title:**Android App Development for Tourist Itinerary			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Kaushal Kashikar	Atharva Jadhav	Sneha Sonaye		
Abstract: Travel Mumbai by the Name indicated smartly makes it way in analyzing user's likes and dislikes and the time period the user is willing to explore a place and gives him with fantastic results in the form of 3 plans to utilize the time. This System is basically used to help a tourist who is new to the city or anyone who wants to explore a city in the given time frame, the system makes use of the Foursquare api to get all the locations and places with all their information to sort and place it before the user in 3 paths to make his choice. The Places are sorted and selected based on the top rakings by the foursquare.				

Paper ID: 107	**Title:**Perceptive Moto Head Protector Using Arduino			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Divya Swamy	Varsha Trimukhe	Ajeet Ghodeswar		
Abstract: In this paper we have discussed how to build a safety system which is integrated with the smart helmet and intelligent bike to reduce the probability of two-wheeler accidents and drunk drive cases. It is proposed such that the Helmet Detection system will be indicating whether the rider is wearing the helmet and this is tested with the help of two IR sensors, the alcohol sensor MQ-3 will be used to check the alcohol consumption level and piezo plates will be inserted in the inner region of the helmet. If an accident takes place then the piezo plates that will be inserted inside the helmet are hit and triggered and will send message to the microcontroller which will send the data to the GSM and GPS module about the accident and the location where accident has occurred.				

Paper ID: 108	**Title:**A review of Photonic and its Advances in Fundamental Sciences and Engineering for different Technologies of Light			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Ms Jyoti Mali				
Abstract: The job of light in our lives is both unavoidable and primordial. Bright light presumably had a job in the very birthplaces of life, and light-determined photosynthesis underlies everything except the most crude of living things today. For people, locate is the most critical of the faculties for seeing our general surroundings. Without a doubt, the exceedingly advanced vertebrate eye is a standout amongst the most lovely light identifiers at any point made. However light is affecting the manner in which we live today in manners we would never have envisioned only a couple of decades prior. As we move into the following century, light will play a considerably increasingly basic job—regularly the focal job—in the manners in which we convey, in the act of medication, in accommodating the country's resistance, and in the instruments we use to investigate the wildernesses of science. Optical science and building—or, all the more helpfully, just optics—is the differing assortment of advancements, together with their logical underpinnings, that try to outfit light for these and different undertakings. This report tends to a wide scope of issues appropriate to this field: its status today, the viewpoint for tomorrow, and what must be done to guarantee its future essentialness.				

Paper ID: 109	**Title:**Criterion Analysis For Anticipating College Admission			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Pratik Patil	Nikhil Salunkhe	Sujit Mandal	Ditixa Vyas	
Abstract: The system is a predictive model for engineering student's college prediction. College Admission Predictor System is a Web based application system within which students needs to enter their HSC and CET marks. Now days, problem becomes more difficult and students fail to understand which college they are likely to get admission even after going through cut-off data of previous years. The system makes use of more number of attributes for more accuracy. Accurate prediction is very important for candidate to fill the application form. Accurate prediction of the performance of college during the student admission process is also important. For this programs applying Naïve bayes and Support vector machine (SVM). This model focuses on the student selection for the university and applies machine learning algorithms to admission dataset.				

Paper ID: 110	**Title:**Bioelectrical Body Fat Analyzer			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Darshan Parab	Vaibhav Patil	Akshay Nandagiri	Deepak Bhanushali	Shikha Malik
Abstract: For our project, we are using the microcontroller provided to make a device that would measure body fat percentage of human body. The basic principle behind the project is known as bioelectrical impedance analysis. This technique uses a small alternating current(AC) flowing between two electrodes attached to skin surface to determine impedance. By determining the opposition to the electric current through body tissues, we can easily estimate the water content of the human body and use it to estimate fat-free body mass. The V-I response characteristics of these tissues can provide a good estimation of percentage body fat.				

Paper ID: 111	**Title:**Crime Rate Prediction Using K-Means			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Snehal Dhaktode	Miral Doshi	Neeraj Vernekar	Ditixa Vyas	
Abstract: Crime is an alarming aspect of our society, and its prevention is a vital task. Crime analysis is a well-organised way of detecting and examining patterns and trends in crime. It is of utmost importance to study reasons, consider different factors and determine the relationship among various crimes occurring and discover the best suitable methods to control crime. The primary objective of this project is to distinguish various crimes using clustering techniques based on the occurrences and regularity. Data mining is used for analysis, investigation and check patterns in crimes. In this project, a clustering approach is used to analyse the crime data; the stored data is clustered using the K-Means algorithm. After the classification and clustering, we can predict a crime based on its historical information. This proposed system can indicate regions which have a high probability of crime rate and distinguish areas which have a higher crime rate.				

Paper ID: 112	**Title:**Prediction of Software Reliability Using Neural Network and Fuzzy Logic			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Nidhi Gupta				
Abstract: Software is often a key component of the high technology systems that are so common in modern society. It is a challenge to be able to enhance the quality a model early enough to prevent problems from fault later in the life cycle because it is much more cost-effective to correct software faults early in the development process than later when they cause failure. D. Whitley et al. (IEEE Tran. On Software Eng. 1992) stated that," the problem of selecting a model can be addressed in two ways: by generalizing the applicability of software reliability growth models by analyzing their predictability across a broad spectrum of representative data sets or by developing adaptive models. One approach proposed by Brocklehurst et al. (IEEE Trans. On Software Eng. 1990) is to try a set of model and selecting the one that best suit the situation. This is a trial and error procedure. It was claimed that different models have different predictive capabilities at different phases of testing and there is no single model that can be relied on for accurate prediction in all circumstances (Whitely et al. IEEE Tran. On Software Eng. 1992).				

Paper ID: 113	**Title:**Catalytic degradation of murexide dye using zinc oxide nanoparticles				
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**	
Priyanka Patel	Sudheer Lingayat	Dr. P.N. Nemade	Dr. B Sonawane	Abhilasha Saini	Dipa Patel

Abstract: Present work focuses on degradation of dyes via chemical route. For this purpose, Murexide dye is used as a model system. Murexide has an absorption maximum (λmax) at 700 nm in aqueous medium. On reduction, murexide is converted into corresponding reduced form which is transparent in visible light into water. In the present study, this reduction reaction is performed using NaBH4. 0.3 mg/ml NaBH4 was added to 25 ppm solution of murexide. Decrease in concentration of murexide, as a function of time, was monitored using UV- Visible spectrometer. Results display that degradation of murexide obeys first order kinetics. Complete degradation of murexide, under present experimental condition, required maximum 2 hrs. This suggests that degradation of murexide to reduced form is thermodynamically favorable but it is kinetically hindered. A probable reason for this can be attributed towards large difference in redox potential of murexide and NaBH4

Paper ID: 114	**Title:**The Study Of Univariate Normal Distribution Mathematical Model For Analyzing The Effects Of Melatonin On Menstrual Cycle			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Akanksha Desai	Poonam Deshpande			

Abstract: The theory of creating bivariate normal distributions is illustrating the consideration of the reliability analyst. Amongst those methods, the classification approach and the modeling approach are very interesting. In fact classification approach is of concentration part to both theoreticians and applied workers. Here we have used a bivariate normal distribution for application from Multivariate normal distribution through classification approach. In our application we have considered days of Menstrual Cycle with Melatonin hormone as variable of women stress effects.

Paper ID: 115	**Title:** Inventory Management Software For Windows In Python			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Amogh Singh	Vimal Negi	Aaditya Tirodkar		

Abstract: Furus Packaging Pvt. Ltd. (FPPLS) uses Enterprise Resource Planning (ERP) as an enterprise management system that integrates and streamlines business processes and functions, including supply chain management (SCM), across entire organization according to the organization's needs. The function of SCM in an ERP is to maintain manufacturing supply chain, which starts from input of data such as bill of material (BOM), planning, and procurement, right up to manufacturing management and report generation. BOM is an important input for supply chain management including Material Requirement Planning (MRP), which is one of ERP modules. At the end of the process reports will be generated which can be used for company's acknowledgment. This study is done at a manufacturing company that has been working manually but having problems in management on thousands of raw material and parts in production shop floor. Poor management in production floor will cause excess or shortages of raw material which indirectly impact business performance of the company. Thus an inventory management system along with MRP module is proposed to be implemented in the ERP to assist manufacturing department in inventory management to eliminate manual management. This module is expected to increase the effectiveness and efficiency of manufacturing productions in managing inventory.

Paper ID: 116	**Title:**A survey on Magic Labeling of digraphs			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Ancy Caroline Dsouza	Dr Kumudakshi S	Poonam Deshpande		

Abstract: In this paper we study the different type of magic labelings for digraphs.Graph labeling is widely used in coding theory, designing of electrical circuits, radar, astronomy, communication networks etc. A magic labeling on a graph G with v vertices and e edges is defined as a one-to-one map taking the vertices and edges onto the integers 1, 2, ... , v+e with the property that the sum of the label on an edge and the labels of its endpoints is constant independent of the choice of edge.(3).A few digraphs for which magic labeling has not yet been assigned is discussed.

Paper ID: 117	**Title:** Water Quality Monitoring system using GSM Based			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Chetan Kadam	Anmol Padwal			
Abstract: Water pollution is one of the biggest threats for the green globalization .Water pollution affects human health by causing waterborne diseases .First step is to estimate the water parameters like pH, turbidity, conductivity etc., as the values of these parameters point towards the presence of pollutants. Thus, it is a manual system with tedious process and is very time consuming. In order to minimize the time and to make the system automated, the testing equipment's can be place in the river water and the detection of pollution can be mode remotely. To ensure the safe supply of drinking water, the quality should be monitored in real time for that purpose GSM based water quality monitoring has been proposed. In this report, the design of GSM base water quality monitoring system that monitors the quality of water in real time is presented.				

Paper ID: 118	**Title:** Intelligent Student Progress Monitoring Application (Ispma)			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Neha Vora				
Abstract: In the world of digitization where every student is holding a smartphone, the scope of distraction is endless. The interest of students is fading in studies and schools and colleges are burdened with students performance. If the student's progress is monitored carefully the student gets an overall learning experience and teachers get feedback to help students with progress. The Education system faces certain human limitation as a barrier to progress monitoring. With a vigilant progress monitoring system the teachers can impart knowledge better. India is moving fast paced towards digitization. The education system also has been digitized greatly with innovative Teaching Aids, smart classes, learning content in AV form, number of Apps, and most importantly free internet. The smartphones and the internet are something that every student has access to. Separating a phone and a kid or teenager is next to impossible. The smart phones and free internet certainly make the student vulnerable to various distractions that may hamper students progress and overall growth. If the phone becomes the progress monitoring device?, then the things would be a lot easy. Here comes our proposed technology Intelligent Student Progress monitoring Application (ISMA). This is a fully automated system that works on the data that is received through a number of sources and process the data. Each student is then evaluated and the machine starts progress monitoring the student according to the behavior pattern, interests, and evaluating other traits. The feedback of which is sent to the institution and Parents.				

Paper ID: 119	**Title:**Involuntary Action Enabled Robotic Prosthesis With Brainwave Control			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Viraj Parab	Mohit Naik	Amit Parab	Mishal Roy	Dr. Bhavin Shah
Abstract: As the field of robotics grows, robotic arms are becoming more and more popular among the specially abled people. The robotic arms controlled directly by brainwaves, or mind-controlled robotic arms as they are called, can carry out a wide range of actions and can greatly improve living conditions for the user. However, most of these arms can only carry out voluntary functions, involuntary (reflex) actions cannot be completed. To rectify this drawback, we shall be proposing a robotic arm which can carry out reflex actions, just like a normal human arm. Our aim would be to put forward an arm which detects motion of the objects in its vicinity, and accordingly carries out reflex actions. The detection of motion shall be done using ultrasonic, proximity and tactile sensors. Arduino and MATLAB software shall be used for transferring the command signal from the sensors to the arm				

Paper ID: 120	**Title:**The Transport Modeling Analysis Of Elliptical Effluence Versus Pseudo-rapidity Profile In High Energy Collision.			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Abhilasha Saini	Dr.Sudhir Bhardwaj	Dr. Bright Keswani	Dr. Ajit Somani	
Abstract: Here an investigational study about the variation of elliptical flow as a function of pseudo-rapidity, employing A Multi Phase Transport model is reviewed. It reflects the notable difference in results of elliptical flow in middle region of rapidity, estimated using event plane technique and the reaction plane technique. On the other hand the results below and above middle rapidity with these mentioned techniques bestow matching flow magnitude, signalizes the dependability of effluence magnitude on analyses technique.				

Paper ID: 121	**Title:**Android Application Controlled Robotic Arm using Bluetooth Module HC-05			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Milan Trivedi	Darshan Pangare	Ranjan Rao	Kajal Yadav	Dr.Bhavin Shah
Abstract: Robotics is the current emerging field in the era of modern technology. Robotics has become more significant as it requires low cost, low maintenance and is more accurate as compared to human work. This paper has proposed a technique to replicate a human arm by controlling it via smartphone. The smartphone uses an application built using the Android platform. This project is designed with an aim to operate the robotic arm with a single touch on the Android application. To accomplish the following, we develop a Human Machine Interaction System (HMIS) based on a smartphone. The command center for the robotic arm is the android application. The Bluetooth module (HC-05) forms the interface between the smartphone and the robotic arm. The robotic arm will have 3 DOF which will enable efficient movement.				

Paper ID: 122	**Title:** Review Paper on the works of Dina Mehta, Caryl Churchill and Marsha Norman			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Rajendra Mahajan	Darbarsing Girase			
Abstract: The history of English literature witnessed that there is a vast difference between the condition, status, perception, understanding and the psyche of the traditional woman and the woman in the twentieth century. This article analyses and examines the experiences and subjectivities of the women characters portrayed in the contemporary select plays, as they journey in quest of the self. The main purpose of this paper is to find out the major themes and aspects of the works of the three playwrights from three different parts of the world, i.e. Dina Mehta from India, Caryl Churchill from Britain and Marsha Norman from America. The paper also highlights the research work carried out on these selected playwrights. This study helps the readers and future researchers to further explore the different approaches of the writing of these playwrights.				

Paper ID: 123	**Title:** Importance of Listening in Communication			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Dr.Ritu Sharma	Dr.P.N Nemade			
Abstract: This paper is going to throw light on the aspect of how listening is an integral part of communication. Communication is the key to success in everyone life. The main purpose of communication is to get across the message clearly. It requires conscious efforts from the participants to make the communication effective. The sender and receiver both should have a mutual interest to have proper communication. If the process of communication is fraught with errors, messages are likely to be misinterpreted by the receiver. Since communication is a skill, it means that it can be learned and mastered. To acquire mastery over any language we need to focus on improving our abilities in Listening, Speaking, Reading and Writing that language. In this paper, we will look at the various ways, methods, and techniques which will help to improve our communication skills by listening effectively.				

Paper ID: 124	**Title:** Currency Recognition System Using Image Processing			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Shraddha Kadam	Krupali Bhave	Amey Humane	Gautam Hegde	Jyoti Mali
Abstract: It is terribly tough to count totally different denomination notes during a bunch. This paper proposes an image process technique to extract currency denomination. The extracted ROI is often used along Pattern Recognition technique. Initial we accumulate the image by an easy flat scanner on fix dpi with a selected size, the pixels level is getting ready to get the image. Some filters square measure applied to extract denomination worth of note. we tend to use totally different picture element levels in several denomination notes. The Pattern Recognition technique is employed to match or realize currency value/denomination of currency value/denomination of currency.				

Paper ID: 125	**Title:** Electricity Generating Shoes			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Jaiky Yadav	Sunny Vishwakarma	Omkar Shinde	Abhijit Prasad	
Abstract: The "PIEZOELECTRIC SENSOR" ,which on applying a pressure will generate power. using that sensor along with other electronic circuitry we'll make a system that fits under the sole of your shoes while you walk, your feet applies some pressure on the sensor in return the sensor produces power which can either be used instantly or can be stored in a battery. This system of ours can also be used in the areas like railway station where the crowd is so huge. We can implant the same sensor and system under the stairs of the bridge people uses to cross one platform to the other. In this case power generation is large enough to light up the whole station.				

Paper ID: 126	**Title:** Design and Implementation of Weather Monitoring System Using Internet of Things (IOT).			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Rishab Raina	Suraj Gupta	Naushad Khan	Shikha Malik	
Abstract: The system nominated in this paper is a modern solution for monitoring weather conditions in a certain location and make information found anywhere in the world. The proficiency behind this is Internet of Things (IoT). This is a modern and competent solution for connecting the things to the Internet. The equipment deals with monitoring the environmental conditions as well as controlling conditions like temperature, humidity, light intensity, CO level with the use of sensors and send the monitored and recorded information to the web page and plot the sensor data as graphical statistics. The data updated can be accessible on internet from any part of the world as the data can be viewed globally.				

Paper ID: 127	**Title:** Smart Visibility Glasses For The Blind			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Amogh Rane	Siddhesh Pujari	Azhar Khan	Gandhar Khopkar	
Abstract: People with visual impairment face various problems in their daily life as the modern assistive devices are often not meeting the consumer requirements in term of price and level of assistance. This paper presents a new design of assistive smart glasses for visually impaired students. The objective is to assist in multiple daily tasks using the advantage of wearable design format. As a proof of concept, this paper only presents one example application, i.e. text recognition technology that can help reading from hardcopy materials. The building cost is kept low by using single board computer raspberry pi 2 as the heart of processing and the raspberry pi 2 camera for image capturing. Experiment results demonstrate that the prototype is working as intended.				

Paper ID: 128	**Title:** Detecting key actors in a multiperson video			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Gauri Chandgude	Viraj Hajare	Shubham Keni	Nahush Dange	Gauri Salunkhe
Abstract: Recognition of a key person in multiperson video is a challenging task, with many people active in the scene but only detecting the desired person. Detection of a desired person in videos has hugely benefited from the introduction of recent large-scale datasets and models. This is mainly limited to the domain where the videos contain only one actor performing only one action. In our project, we are presenting a model and dataset for this particular setting. Videos captured in public places typically contain many people interacting with each other. In our work, we use annotation to highlight the detected key person. We show how to use a neural network to represent information of a desired person; the annotation model is trained with selecting the most relevant figure of that person in each frame. We are introducing an annotation based model for detection in multi-person videos. Our method can generalize to any multi-person setting.				

Paper ID: 129	**Title:** A Survey on Study of some Creation Field Cosmological Models			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Monika Shah	Dr. Preeti Mehta	Poonam Deshpande		
Abstract: The present paper introduces the work done on the study of creation field cosmological models and their physical and geometrical properties. We have observed that the theoretical cosmological models are constructed using Einstein field equation and different assumptions				

Paper ID: 131	**Title:** Real World Scanning and 3d Modeling Using LiDAR			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Gaurav Raje	Nirmal Mandal	Udit Rikame	Varsha Randeve	Namrata Lade

Abstract: Ever since the computer graphics came in existence, we have been using various techniques to create 3D models and animations of different objects. In engineering fields these 3D modeling techniques play vital roles, whether it's creating software model of cars in automobiles or floor planning in architecture. Our project is also based on same idea of creating 3D models by scanning real world object using LiDAR. LiDAR- Light Detection and Ranging uses laser pulses to scan a particular area in 360 degrees. We are going to use two motors to move LiDAR sensor in desired direction. LiDAR data, called as point cloud, then will be processed in the Processing 3D software (version 3) to render 3D models. The portability of device will allow us to attach it to other devices such as drones and RC cars.

Paper ID: 132	**Title:** Holographic Virtual perception And Game Development And control with Hand Gesture			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Vaibhav Kothari	Samita Bhandari	Darshan Kadam	Vyankatesh Dewalekar	Nishant Patil

Abstract: The progression of increased reality and holographic presentation innovations has an incredible potential to support and enhance instructing. The 3D pictures give new viewpoints to the understudies to get it certain theme effectively and we can transform 3D picture using Hand Gesture. In this paper, an Intelligent Holographic Showcase is presented, which is planned to facilitate the educators to convey the information to the understudies just as to give self-figuring out how to the understudies. This proposed arrangement is executed utilizing the AR following strategy and combined with 3D holographic pyramid show & Game development. This influences the virtual articles to can show in slim air like a genuine article and makes the holographic impact progressively sensible and intuitive, as the client can interact with the virtual items utilizing a picture target. This paper clarifies how the framework is physically acknowledged and Game development in term of equipment arrangement and programming structure.

Paper ID: 133	**Title:** Solar Hybrid Bicycle				
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**	Author6:
Ajinkya Trimukhe	Muthukumar Nadar	Sahil Kanchan	Fahed Shaikh	Suvarna More	Shreyashi De

Abstract: Fuel prices in India and around the world increases day by day, so there is a great need to look for an alternative to conserve these natural resources. Promoting the use of hybrid vehicles can reduce CO2 emissions and fuel costs. Therefore, a solar bicycle is an electric vehicle that offers an alternative to using solar energy to charge the battery, and therefore provide the voltage required to run the engine. The hybrid bike combines the use of solar energy, as well as the dynamo that runs through the pedal to charge the battery to run the bicycle. The bicycle has the most viable solar/electric power generation system mounted on the vehicle to charge the battery during all durations. This multiple-load vehicle can be loaded with both solar and mechanical energy. The solar panels can be mounted on the back of the bicycle to capture the sun's rays. When there is no sun, mechanical work acts as an auxiliary energy source. To control the speed of the engine, an accelerator is provided that controls the supply. This type of technique involves reducing the operating cost and increasing the efficiency of the vehicle's operation. The speed of the hybrid solar bicycle can reach up to 10-15 km/h carrying a load of a person of average weight.

Paper ID: 134	**Title:** Android Application for GRE Vocabulary Memorization			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Tushar Kamble	Chinmay Joshi	Jigar Masekar	Nikita Patil	
Abstract: The Graduate Record Exam (GRE) is among the many standardized tests that a student has to give while applying for higher studies. It is a comprehensive exam that is designed to test a pupil's skill in Quantitative, Verbal and Analytical areas. Through statistical data we have come to know that students find it easier to score well on the Quantitative sections but have a very hard time dealing with the Verbal sections of the test. So is that students taking the test have good math skills but lack somehow in their verbal reasoning skills? It may be true or it may not. Indeed, there are few students who manage to score well in the verbal sections. It may be because they are already well versed with their verbal abilities or perhaps they might have undergone some rigorous training to improve their verbiage. Our proposed system is somewhat intended to help those particular set of students facing difficulty in the verbal parts of the test. Our system will basically help the students improve their vocabulary with help of visual aids which we are incorporating in our system.				

Paper ID: 135	**Title:** Spectrum Sensing in Cognitive Radio			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Mahita Hari Prasad	Harshal Lele	Hamza Qureshi	Kavita Bani	
Abstract: With the advance in wireless communications, there is a lot of demand for bandwidth in a limited available spectrum. In addition to this, some frequency bands remain underutilized most of the time, and some are less used. This leads to spectrum usage inefficiency. Cognitive radio is one way to solve this problem. It is a technique where the secondary user transmits in unused spectrum that is owned by the primary user. Spectrum sensing is the process of finding free bands. Energy detection is the most popular method of spectrum sensing, because of its ease of implementation.				

Paper ID: 136	**Title:** Single Precision Fpu Using Verilog: Review Of Delay And Speed Parameters			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Shraddha Hegde	Charmi Gandhi	Khushbu Patel	Kishor Bhosale	
Abstract: A Floating point unit colloquially a math processor, is specifically designed to carry out operations on floating point numbers .For single precision itself more than 32 operations are possible. This paper deals with high speed ASIC implementation of single precision (32-bit) FP-ALU which performs add, subtract AND and OR operations using Verilog HDL language according to IEEE -754 standard. The delay parameter of simple Add operation is checked with RCA and CLA using Xilinx 14.7 ISE. The block diagram schematics are also viewed in Ni Multisim 14.0 software.				

Paper ID: 137	**Title:** Multifunctional Robot for Surveillance			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Aakanksha Pachange	Vrinda Patel	Nikita Patkar	Sakshi Shetty	Prajakta Borole
Abstract: The enemies used different types of tanks, missile, guns, etc at the border areas. This cause problem and harm to soldiers Many defence take the help of robots in hazardous condition to carry out risky job that cannot done by any soldier. The main principle of the robotic system is to monitor various conditions on-field. The robots used in defence are usually employed with sensors, cameras for live streaming, integrating circuits systems for tracing the unknown person. This multisensory robot used to detect human bombs, harmful gases and fire at remote and war field areas. These Robots are capable to function in hazardous environment where an unprotected human would quickly die.				

Paper ID: 138	**Title:** The Diagnosis of Macular Edema in Color Fundus Images Using Image Processing			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Devashree Patrikar	Dhanashree Pannase			

Abstract: The leading cause of blindness in the western working age population and micro aneurysms is Diabetic retinopathy. In Diabetic retinopathy (DR) the blood vessels of the retina of the human eye get damaged which affects the vision. Diabetes causes very high amount of glucose to flow through the blood vessels resulting in its damage. If these blood vessels are present near the macula region i.e. the central region of the eye it affects the vision. As the amount of glucose increase, the blood vessels leak fluid onto the macula leading to its swelling which blurs the vision eventually leading to complete loss of vision. This paper is based on the detection of the eyes having normal vision from the eyes affected by Macular Edema. Here the images of the eyes having normal vision are compared with the images of the eyes that are affected with Macular Edema. The method of Rotational Asymmetry is used to identify the Macular Edema affected images. If the image is edema affected it also states its severity of the disease using Computer Aided Diagnosis. To capture the global characteristics of the fundus images and discriminate the normal from DME images a feature extraction technique is introduced.

Paper ID: 139	**Title:** Effective Cryptography Using Artificial Neural Network			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Satish Yadav	Gaurav Sancheti	Rohan Shinde	Shravan Singh	Jyoti Mali

Abstract: The main objective of this work is to explore the problem: the use of artificial neural networks for the retransmission of the encoding of images of large satellites. The central accreditation uses fixed and arbitrary keys in the learning process, such as classical symmetric and asymmetric coding. The network used is NxMxN neurons, hidden levels and output. The network is being trained to regulate the weight and the bias receives a fixed value from 0 to 1 after normalization. Is biased is determined. The supply capacity between the input layer and the hidden layer, the layer acts as the first key (K1), while the bias is partial, the hidden layer and the outer layer represent the second key (K2). The course method uses K1, K2, or both, and is done by using small-sized images to improve speed. Then, the network is used to encode and resolve images from normal satellites. Many tests prepared several satellite, optical and SAR images, and so on, the content between decoding (quality of decryption), good quality images and decoding were at least 98% of images that the network has not been previously trained to decode. They also found that the network does not affect the distortion of the geometric image, such as translation, size and rotation

Paper ID: 140	**Title:** HNN Based Controller Optimization of Flexible Single-Link Manipulator			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Namrata Lade	Om Prakash			

Abstract: As we know the manipulator performs the important role in nanotechnology and biotechnology. The flexible link manipulators are important as the robots are used in industrial purpose in which heavy task is performed. This paper presents a review on various studies of flexible link manipulators. We have studied much previous research on flexible link controller. In their research we have found some issue like, energy consumption, error, hub angle problem etc. In this paper we will go through various papers and from this we can find different issues related manipulators.

Paper ID: 142	**Title:** Restaurant Review Analysis and Classification using SVM			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Veda Waikul	Onkar Ravgan	Aruna Pavate		

Abstract: Whenever people go to any restaurant, approximately 1-2 hours are spent by them at the restaurant depending on their order. They have to order the food and then wait for the 15-20 minutes for the arrival of the food. Wrong order can be taken by the waiter, which can waste the customer's time and money as well as the customer doesn't get satisfied by such food. This process becomes tedious if someone is in great hurry and can't waste so much of time. It becomes worse if there is a waiting queue. The high failure rate of new restaurants- estimates including two out of three restaurants close in the first year, or three out of four close in the first two years, and so on and so on.

Paper ID: 143	**Title:** Engineering College Recommendation and Prediction of Cutoffs			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Yash Jagda	Jatin Metar	Mihir Jethwa	Amruta Sankhe	

Abstract: We are living in a generation in which education plays a key role to one's life. The awareness of education is more than at any other time. There is hardly an industry which does not require education. Education organization are one of the important part of our society and playing a vital role in growth and development of a nation. Considering, Engineering a branch of education. A lot of student from Junior College entering an Engineering college for an important period of their life to make a career have a problem in searching college for a particular branch according to their marks .To solve this issue, we are aiming to develop a website or web-based application where student can enter marks and are give a result of eligible college and branch .The main agenda for developing such web based project:-Use of Information Technology in education system or admission process .Automate the process of admission .To get a perfect and deserved college without any counselling .To get a better education system. After conducting a few surveys with Engineering college students, we concluded that students are unaware or regret where they could have got admission but couldn't due to lack of knowledge and such web-based application.

Paper ID: 144	**Title:** Survey on : Internet of Things			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Nikita Patil	Mamta Meena	Mahendra Patil	Sarang Kulkarni	

Abstract: Remote correspondence systems are exceedingly inclined to security dangers. The significant uses of remote correspondence systems are in military, business, social insurance, retail,
what's more, transportations. These frameworks utilize wired, cell, or adhoc systems. Remote sensor systems, actuator systems, and vehicular systems have gotten an extraordinary consideration in the public arena what's more, industry. As of late, the Internet of Things (IoT) has gotten extensive research consideration. The IoT is considered as eventual fate of the web. In future, IoT will assume an indispensable job also, will change our living styles, guidelines, just as business models. The utilization of IoT in various applications is normal to rise quickly in the coming years. The IoT permits billions of gadgets, people groups, and administrations to interface with others and trade data. Because of the expanded utilization of IoT gadgets, the IoT systems are inclined to different security assaults. The sending of productive security and protection conventions in IoT systems is incredibly expected to guarantee secrecy, verification, get to control, and respectability, among others. In this paper, a broad complete investigation on security and protection issues in IoT.

Paper ID: 145	**Title:** Automatic Waste Segregation			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Manasi Jadhav	Snehal Jagdale	Jidnyasa Raut	Prajakta Borole	

Abstract: The purpose of this project is to reduce health issues of rag pickers due to harmful materials in waste. Rag pickers have an illness due to infection of skin, respiratory system, gastrointestinal tract and other allergic disorders. In this project waste is mainly segregated into three categories that are metal, wet and dry waste by using Microcontroller AT89S52. This system utilizes low cost components for the successful segregation of most types of waste. When installed in industries, it proves to be beneficial in sorting the waste at the site of disposal itself. The occupational hazard for rag pickers is reduced. Also the segregated waste can be directly sent to recycle.

Paper ID: 146	**Title:** Plants' Leaf Diseases Detection Using Digital Image Processing			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Nihal Joshi	Atharva Jadhav	Satyendra Maurya	Aasif Sudiwala	Disha Bhosle

Abstract: In agriculture field identification of plant disease is very difficult. If identification is incorrect then there is a huge loss on the production of crop and economical value of market. Leaf disease detection requires huge amount of work, knowledge in the plant diseases, and also require the more processing time. So we can use image processing for identification of leaf disease in MATLAB. Identification of disease follows the steps like loading the image, contrast enhancement, converting RGB to HSI, extracting of features and SVM.

Paper ID: 147	**Title:** Techniques to Improve Communication Skills of Engineering Students			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Balaji Shinde				
Abstract: Effective Communication in English is the need of an hour in personal and professional life for Engineering students. Since all Multi National Companies are result oriented always seek for the employees who can communicate convincingly and effectively. A lack of effective communication skills serves only to be disqualified in the placement interviews. Hence, after a brief look at the outline of the students of engineering, I felt a need for the study of the appropriate techniques to improve communication skills of Engineering graduates for better placements. Therefore, the present paper attempts to suggest a few techniques to be adopted by the Engineering under graduates to equip with the essential skills. In this paper we will look at the various ways, methods and techniques which will help to improve communication skills in general and the English language in particular.				

Paper ID: 148	**Title:** Customer Relationship Management System For Barmadas Ltd.			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Piyush Pagdhare	Chandan Nachanekar	Amruta Sankhe		
Abstract: CRM is the strategic use of information, process, technology, and people to manage customer's relationship with your company (marketing, sales, services and support) across the whole customer life cycle. Customer relationship management (CRM) is a widely implemented strategy for managing a company's interaction with customers, clients and sales prospective. Customer relationship management is a term that refers to practices, strategies and technologies that companies use to manage and analyze customer interactions and data throughout the customer lifecycle, with the goal of improving business relationships with customers.				

Paper ID: 149	**Title:** Zigbee Controlled Boat with Wireless Video Transmission			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Kaustubh Pore	Apar Mayekar	Masoom Gupta	Sandip Zade	
Abstract: This represents the usage of remote versatile robots utilizing Zigbee convention with the end goal of route utilizing PC, actualized with remote vision framework for remote checking and control. Its primary component is its utilization of the Zigbee convention as the correspondence medium between the portable robot and the PC controller. The equipment framework depends on the Atmega328 microcontroller and an Xbee module. The framework gives persistent visual observing through the camera appended to the portable robot, sending information to the control unit. Remote testing is done on the portable robot for inquiry and salvage missions by means of a set up radio recurrence (RF) correspondence utilizing DIGI XBee RF module.				

Paper ID: 150	**Title:** Virtual Reality Telepresence Robot Using Raspberry Pi			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Viraj Savtirkar	Chetan Rane	Suraj Kupale	Kunal Rathod	Ameya Jadhav
Abstract: A telepresence robot is a remote-controlled, wheeled device with a display to enable video streaming which enable the participants to view remote locations, as if they were there. The project consist of a VR headset, with a smartphone in dual screen to experience virtual reality and 4 wheeled robotic vehicle. The movement of the Robot is controlled using a remote controller. The motion of the camera of the robot is controlled by the accelerometer and magnetometer data processed by Arduino and Raspberry Pi. Video streamed is received by the smartphone using the IP address specified by the Raspberry Pi				

Paper ID: 151	**Title:** Effect of IT in Core Banking Implementation in Co-operative Banking			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Priya Borade	Sandesh Borade			
Abstract: Implementation of Core banking Software is one of difficult task from selection to implementation phase. Here we understand the CBS importance and benefits of CBS software And role of IT the challenges which are getting arises during all the phase of CBS on which we need to concentrate and study those challenges. Effect of IT is huge on implementation of CBS in co-operative sector banking. we are here studying the core banking, co-operative banking as well as effect and challenges of IT which implementing the CBS in co-operative sector banks.				

Paper ID: 152	**Title:** IOT Agriculture			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Priya Borade	Sandesh Borade			
Abstract: In India we in last few years we are seeing the farmers are doing suicides for not getting good profit or not even getting the invested amount for any crop. This situation becoming critical day by day because there is no accurate data collection of the planned, actual crop which in terms fails in getting the good profit due to excess of food grains in market and it is loss of farmers on the other hand if it crop production happens at lower side it affects the normal consumers and it also cause inflation for normal consumers, to find balance for good production, its cost also government can decide the import export policy based on early accurate data of crop planning and production it helps for all to do the decision making. In the recent years we have seen the example of pulses, cotton, fruits etc for such gaps between planting and production of actual crop and also in increase/decrease in price due to excess or shortage of food grain.				

Paper ID: 153	**Title:** Vehicle Security And Road Sign Detection using Image Processing			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Akshata Shenoy	Gopal Sharma	Rohit Yadav	Sneha Shinde	Ankur Bhattacharjee
Abstract: An overview of the road and traffic sign detection and recognition with the SMS alert system when an accident occurred has been presented . Road sign detection and recognition technique is important to support a driver. Failure detection by the driver of any traffic sign may increase accident risk significantly. The time between an accident occurrence and the emergency medical personnel are dispatched to the accident location is the important factor in the survival rates after an accident. By eliminating that time between an accident occurrence and the first responders are dispatched to the scene decreases mortality rates so that we can save lives. One approach to eliminate that delay between accident occurrence and first responder dispatch is to use an Accident Alert system , which senses when a traffic accident is likely to occur and immediately notify emergency occurred . A system that can automatically recognize the traffic signs has been needed to reduce traffic accidents and to drive more freely. Traffic sign recognition system meet this need. This study includes traffic sign detection and recognition application.				

Paper ID: 154	**Title:** Institute Admission System				
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**	Author6:
Jeet Bafna	Harshit Shetty	Pavankumar Kamath	Rushikesh Patel	Adit Patil	Mahendra Patil
Abstract: Admission Systems currently being used in the organization is manual and requires a lot of labor work. Our system aims to automate the entire admission process making it easy for students as well as staff. This will also provide a centralized database due to which the accessing of data at critical moments will be a walk in the park. Staff would be able to access each student's data with ease and can update.					

Paper ID: 155	**Title:** Marine Canister - Automated Mobile Seabin			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Priyanka Tripathi	Tarang Mehta	Mihir Kothari	Satish Yadav	Rupam Suriya
Abstract: The Seabin is a floating rubbish bin that is located in the water at marinas, docks, yacht clubs, Swimming pools & commercial ports. The Seabin moves up and down with the range of tide collecting all floating rubbish. Water is sucked in from the surface and passes through a catch bag inside the Seabin, with a submersible water pump, plugged directly into 12V outlet. The water is circulated inside the Canister & back into the marina leaving litter and debris trapped in the catch bag to be disposed off properly. The Seabin also has the potential to collect a percentage of oils and pollutants floating on the water surface. The Seabin Project is far more than a product; our ultimate goal is to "Have pollution free oceans for our future generations". To get there we are working to make the Seabin better and better in terms of affordability and reliability. Also, educating and raising awareness to be able to one day live in a world where pollution devices are not needed.				

Paper ID: 156	**Title:** Sentiment Analysis Of Product Reviews using Machine Learning Approach			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Mathew Pazhur	Vallabh Natu	Pavan Dhake	Aruna Pavate	
Abstract: Nowadays, a huge number of user reviews are being generated on every e-commerce websites such as Flipkart, Snapdeal, Amazon, etc. These reviews help the user to make a decision whether to purchase the product or not. In order to make a decision Sentiment Analysis is used. Sentiment analysis of product reviews in done to understand whether a product is doing well on the market or not without depending on overall ratings and stars which are often unreliable. Different machine learning algorithms provide different attributes of success for sentiment analysis in terms of product reviews. It is necessary to know which algorithm is best suited for sentiment analysis of product reviews. This paper proposes a sequential analysis and comparative study of algorithms like Naïve Bayes, SVM and Random Forest.				

Paper ID: 157	**Title:** Home Energy Management Based on Power Line Communication			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Abdullah Mukhi	Avinash Tripathi	Rakshit Poojary	Niranjan Samudre	
Abstract: Smart metering and power line communication can give nitty gritty data of vitality utilization designs and insightful controlling to apparatuses at home. We propose a home energy management system (HEMS) based on power line communication that can give simple to-get to data on home vitality utilization progressively, astute getting ready for controlling apparatuses, and enhancement of intensity utilization at home. The HEMS consists of three modules: an advanced power control planning engine, a device control module, and a power resource management server. Our model framework diminishes the expense of intensity utilization by around 10 percent.				

Paper ID: 158	**Title:** Emotion Recognition using Speech Signal			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Niranjan Samudre	Rahul Sharma	Arman Ansari		
Abstract: In the present day speech signal process has a very big selection of applications in several technical fields like human laptop interaction, biometrics, computing etc. In speech processing emotion recognition is major research area where different emotions of people are recognized in this paper the proposed system allows recognizing a person's emotional state from audio signals. The projected solution is aimed toward raising the interaction among humans and computers, therefore permitting effective human-computer intelligent interaction. The system is in a position to acknowledge six emotions (anger, boredom, disgust, fear, happiness and sadness).This set of emotional states is wide used for emotion recognition functions. It conjointly distinguishes one feeling versus all the opposite potential ones, as tried within the projected numerical results. The system consists of 2 subsystems specifically feeling recognition (ER) Gender recognition (GR).For this two support vector machines (SVMS) are used for the male and female speaker emotion recognition.				

Paper ID: 159	**Title:** Feature Extraction by Surf Technique used for Content Based Video Retrieval			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Mamta Meena	Nikita Patil	Mahendra Patil	Sarang Kulkarni	
Abstract: Content Based information retrieval is an active area of research these days. The growth of multimedia data is increasing day by day. So, there is great need to make advancements in this area. we are discussing about the content based video retrieval as well as new advancements in this area. If the video sequences are stored based on contents like color, texture, or events, then the video mining may be speed up to a great extent. So, we have tried to present a novel method which will be very efficient to work on large video database and the multiple contents of video will lead to accurate result for retrieving the videos in a faster manner thus avoiding the need of extensive human efforts, making some lives easier.				

Paper ID: 160	**Title:** Propagation Path Loss Modeling in Millimeter Wave Bands for 5G Cellular Communications			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Jyoti Dange	Dr. R.P. Singh	Dr.Vikas Gupta		
Abstract: This paper presents a probabilistic position millimeter-wave path loss model supported real-world 30GHz mm wave frequency measurements. The probabilistic path loss approach uses a free path line-of-sight propagation model and for non-line-of-sight conditions uses a close-in free house reference distance pathlossmodel. The probabilistic model employs a coefficient operate that specifies the line-of-sight likelihood for a given transmitter-receiver separation distance. Results show that the probabilistic path loss model offers just about identical results whether exit or not .One uses a non-line-of-sight close-in free house reference distance path loss model, with a reference distance of onemeter, or a floating-intercept path loss model. This letter additionally shows that site-specific environmental data could also be used to yield the probabilistic coefficient function for selecting between line-of-sight and non-line-of-sight conditions.				

Paper ID: 161	**Title:** Propagation Path Loss Modeling in Millimeter Wave Bands for 5G Cellular Communications			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Jyoti Dange	Dr. R.P. Singh	Dr.Vikas Gupta		
Abstract: This paper presents a probabilistic position millimeter-wave path loss model supported real-world 30GHz mm wave frequency measurements. The probabilistic path loss approach uses a free path line-of-sight propagation model and for non-line-of-sight conditions uses a close-in free house reference distance pathlossmodel. The probabilistic model employs a coefficient operate that specifies the line-of-sight likelihood for a given transmitter-receiver separation distance. Results show that the probabilistic path loss model offers just about identical results whether exit or not .One uses a non-line-of-sight close-in free house reference distance path loss model, with a reference distance of onemeter, or a floating-intercept path loss model. This letter additionally shows that site-specific environmental data could also be used to yield the probabilistic coefficient function for selecting between line-of-sight and non-line-of-sight conditions.				

Paper ID: 162	**Title:** Automated Analysis Of Freeware Installers Promoted By Download Portal			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Bhavna Arora	Nida Parkar	Priti Rumao		
Abstract: Freeware is proprietary software that can be used free of charge. A popular vector for distributing freeware is download portals, i.e. websites that index, categorise, and host packages. download portals can be abused to distribute doubtlessly unwanted applications (doggy) and malware. The abuse may be due to doggy and malware authors importing their ware, by means of benign freeware authors joining as affiliate publishers of pay-according to-installation (PPI) services and other associate programs, or by means of malicious down load portal owners. The authors perform a scientific observe of abuse in download portals. They build a platform to move slowly down load portals and apply it to down load 191 okay home windows freeware installers from 20 download portals. They analyse the gathered installers and execute them in a sandbox to screen their set up. They degree an general ratio of domestic dog and malware between 8% (conservative estimate) and 26% (lax estimate). In 18 of the 20 down load portals examined the amount of puppy and malware is underneath nine%. but, additionally they locate two download portals exclusively used to distribute PPI downloaders. ultimately, they detail special abusive behaviours that authors of unwanted programs use to distribute their applications thru down load portals.				

Paper ID: 163	**Title:** Intrusion Detection Algorithm Based on Convolution Neural Network			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Priti Rumao	Bhavna Arora	Nida Parkar	Samira Nigrel	
Abstract: With the quick advancement of system innovation, dynamic safeguarding of the system interruption could really compare to previously. So as to improve the knowledge and precision of system interruption identification and lessen false cautions, another profound neural system (NDNN) show based interruption recognition technique is structured. A NDNN with four concealed layers is demonstrated to catch and group the interruption highlights of the KDD99 and NSL-KDD preparing information. Tests on KDD99 and NSL-KDD dataset demonstrates that the NDNN-based strategy improves the execution of the interruption recognition framework (IDS) and the precision rate can be gotten as high as 99.9%, which is higher when contrasted and different many interruption location strategies. This NDNN model can be connected in IDS to make the framework progressively secure.				

Paper ID: 164	**Title:** Study of Traffic Symbol Detection System			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Rajas Thawal	Suvarna Pansambal			
Abstract: Every year all over the world, traffic accidents occur due to not following proper traffic Symbol instruction, Bad weather, speed and driver behavior. The Traffic Symbol Detection System is used to detect traffic symbol, warn a diver and generated appropriate sound related symbols.The main objective of this system is to provide a safe and manually controlled while driving. This paper gives a comprehensive survey about the traffic symbol detection system developed by the researchers and the comparison between them. The advantages and disadvantages are also discussed in this paper.				

Paper ID: 165	**Title:** Lighting Two Candles With One Flame: An Unaided Human Identification Protocol With Security Beyond Conventional Limit			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Nida Parkar	Bhavna Arora	Priti Rumao	Chandana Nighut	
Abstract: Structuring an effective convention for staying away from the danger of account based assault in nearness of an amazing meddler remains a test for over two decades. Amid confirmation, the nonappearanceof any safe connection between the prover and verifier makes things much increasingly powerless as, subsequent to watching an edge test reaction pair, clients' mystery may effortlessly get determined because of data spillage. Existing literary works just present new systems with guaranteeing better angles over past ones, while disregarding the perspectives on which their proposed plans adapt ineffectively. Obviously, the greater parts of them are a long way from acceptable either are found a long way from usable or absence of security highlights. To conquer this issue, we initially present the idea of "spillage control" which puts a bar on the common data spillage rate and significantly helps in expanding both the ease of use and security measures. Prevention, yet additionally, by presenting the risk discovery procedure (in light of the idea of honeyword), our plan "lights two candles". It not just takes out the long terms security and convenience strife under the handy situation, yet alongside risk identification from customer side, it is equipped for ensuring the mystery at the server side under the appropriated structure, and therefore, ensuring security past as far as possible.				

Paper ID: 166	**Title:** Solar Radiation Data Mining			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Tejas Talwadekar	Sayali Satoskar			

Abstract: Solar energy is radiant light and heat from the Sun that is harnessed using a range of ever-evolving technologies such as solar heating, photovoltaic, solar thermal energy, solar architecture, molten salt power plants and artificial photosynthesis.
It is an important source of renewable energy and its technologies are broadly characterized as either passive solar or active solar depending on how they capture and distribute solar energy or convert it into solar power. Active solar techniques include the use of photovoltaic systems, concentrated solar power and solar water heating to harness the energy. Passive solar techniques include orienting a building to the Sun, selecting materials with favourable thermal mass or light-dispersing properties, and designing spaces that naturally circulate air.
Solar energy being a renewable source of energy is a clean and pollution free energy source available. For the effective utilization of solar energy received on earth, various research and development is carried out. Estimation of Solar Energy received during day time and Increase in the efficiency of Solar Systems is the need of hour. Data mining being a process of exploring patterns from large data sets that can be applied for the purpose of determining the solar radiation received over a particular area on earth. This system deals with capturing solar radiation in terms of watts/meter2, per second over an area continuously, and providing an effective data for the peak hours per day, peak days per week, and peak months in a year. The various patterns of Solar Radiation can be observed and studied, which can help for the development of Solar Power Generation Systems over a particular area with maximum efficiency.

Paper ID: 167	**Title:** Emotion Recognition from Facial Expression			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Akshay Mishra	Siddhesh Khanvilkar	Aditya Ahirwar	Niranjan Samudre	

Abstract: Emotions play a very important role in our day to day life. Emotions are the natural physiological response of the human body which can be recognized by the facial expression. In the proposed system research has been done in the field of Human Computer Interaction(HCI). The entire project is divided into three major steps i.e. Face detection, facial feature extraction and classification.

Paper ID: 168	**Title:** Controlling Mouse By Facial Expression Using HAAR Classifier			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Pratap Kadam	Sahil Ekhe	Vishal Narkar	Shweta Sharma	Neha Kunte

Abstract: Computers that have been developed today have a increase in amount of power. Most of this power is used by software's for processing data. In the past twenty years we've got seen a large amendment within the quantity of information that a laptop will method and also the speed at that it will do that.. But the primary input devices haven't been a major change in the user interfaces for the past 10 years this project analyzes the biometric identification and tracking related technologies of human computer interaction Based on face detection algorithm which does not depend on specific biometric identification and tracking. This system can be used for upper limb peoples who fails to use traditional mouse and keyboard it can also be used for general computer users to do neck rehabilition training games etc.

Paper ID: 169	**Title:** Automated Ration Distribution System			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Tanveer Ansari	Vaishnav Chitte	Gaurav Kamble	Prathamesh Shilkar	Prof. Samuel Jacob

Abstract: RFID based programmed apportion framework is a methodology in open circulation framework helpful for increasingly productive, precise and robotized system of proportion conveyance. The regular apportion dissemination framework has downsides like incorrect amount of merchandise, low preparing pace, huge holding up time and material robbery in proportion shop. The proposed programmed apportion look for open appropriation framework depends on Radio Frequency Identification (RFID) innovation that replaces customary proportion cards. The RFID labels are given rather than regular proportion cards. Customer's database is put away in miniaturized scale controller which is given by Government Authority. Client needs to examine tag to RFID per user, and afterward smaller scale controller checks client's subtleties with put away to appropriate material in apportion shop. After-effective verification, client needs to enter kind of material just as amount of material utilizing keypad. Subsequent to conveying appropriate material to shopper, the smaller scale controller sends the data to client just as PDS

specialists utilizing GSM

Paper ID: 170	**Title:** Model Driven Development Using AngularJS Framework			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Diksha Ingale	Snehal Chaudhary	Priyanka Paygude		
Abstract: As everyone thinks of having effortless and comfortable life whether it is at home or at office irrespective of their profession. So to reduce the workload of developers in developing software an approach is used which is named as Model Driven Development. As the main target of software engineering is to develop effective and efficient software applications in less time. So to achieve this Model-driven Development is used, which itself uses models for code generation. In this some part of code is generated automatically which accelerates the process of development. And then only the code template is required to be filled with the business logic. In a case study it is seen that about 87% of the code is generated automatically using Model-driven Development.				

Paper ID: 171	**Title:** Web Based Patient Record Management System			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Helly Patel	Adishri Adhau	Arvindsingh Gangwar		
Abstract: In this system, we aim to provide a way for medical practitioners to obtain and maintain a patient's medical history without any ambiguity. The system also aims to curb the rate of misuse of prescriptions for malicious purposes. We propose a system that would store the patient's diagnosis, test reports, emergency details, allergies, medicine prescriptions as well as emergency contacts in order to enforce transparency. In order to solve this problem, we provide patients with a unique identity card which can be used by medical practitioners or chemists to access the patient's medical details.				

Paper ID: 172	**Title:** Un-Tether -- Enables Appliances to be Controlled Wirelessly			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Yash Chitre	Sourav Bhamare	Apeksha Waghmare		
Abstract: There are number of appliances in our homes which have the potential to be modified so as to improve the standard of living. This project aims to increase the capacity and reach of such appliances. It aims to essentially convert traditional wired devices into wireless devices. The major goal of this device is to create a cheap alternative so that even the general population can afford it. A lot of times, the home owners forget to switch off the electronic devices that consume a lot of power, resulting in wastage of power when going out for a few days. Furthermore, a person can save a lot of time by switching on electronic devices that take time to function before use. By making such devices wireless, the issues are eliminated and a person is able to control their electronic devices from theoretically anywhere in the world.				

Paper ID: 173	**Title:** Customer Prediction System for Salon Management System			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Meet Shah	Varun Sura	Deepali Maste		
Abstract: Hard drives and cloud storage are sources of permanent storage in present days. In our era after the Industrial Revolution, the old methods of writing logs have become futile as the computers have taken their place. Long term memories (cloud, hard drive) are used to store the data safely which can be extracted whenever you like. With these, the record keeping system of all the businesses have been revolutionized and the safety of the data has also been ensured that way. This system is designed to safeguard the data of a salon by saving the entire customer onto a cloud database and provide reports to the owner so that they can check which services are more used and how much is the weekly and monthly income. The system also has a module which predicts the next visit of the customer based on various parameters such as service used and the customer himself, based on these predictions the Customer gets a notification that it is time to get the service again.				

Paper ID: 174	**Title:** Enhanced Data Storage Security in Cloud Environment using Encryption, Compression and Splitting technique			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Mohit Patil	Pratik Chavan	Pratish Chavan	Nileema Pathak	
Abstract: Now days cloud computing has become one of the main topics of IT and main point is cloud data storage security. Cloud computing is the fastest growing technology. This technology provides access to many different applications. Cloud computing is used as data storage so data security and privacy issues such as confidentiality, availability and integrity are important factor associated with it. Cloud storage provides user to access remotely store their data so it becomes necessary to protect data from unauthorized access, hackers or any type of modification and malicious behavior. Security is an important concern. The meaning of data storage security is to secure data on storage media. Cloud storage does not require any hardware and software management. It provides high quality applications. As we proposed the concept of cloud data storage security strategy capable to overcome the shortcomings of traditional data protection algorithms and improving security using steganography, encryption decryption techniques, compression and splitting technique adoptable to better security for the cloud. We have developed a desktop application through which user can share data. This paper enhanced advance security goal for cloud data storage.				

Paper ID: 175	**Title:** Implementation of Various Logic Circuits and Evaluation by Power Efficiency			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Siddhesh Posam	Saurabh Tripathi	Sonam Kandalgaonkar		
Abstract: The power dissipation in standard CMOS circuit can be decreased through adiabatic technique. By adiabatic technique dissipation in PMOS network may be decreased and a few of energy keep at load capacitance may be recycled rather than dissipated as heat. however the adiabatic technique is extremely passionate about parameter variation. With the assistance of MICROWIND simulations, the energy consumption is analyzed by variation of parameter. In analysis, 2 logic families, ECRL (Efficient Charge Recovery Logic) and PFAL (Positive Feedback adiabatic Logic) area unit compared with standard CMOS logic for electrical converter NAND and NOR circuits. it's finding that adiabatic technique is sweet alternative for low power application in nominative frequency vary.				

Paper ID: 176	**Title:** Weather Prediction App			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Bhavika Joshi	Vishakha Sutar	Deep Gosaliya	Renuka Nagpure	
Abstract: Weather forecasting is a vital application in meteorology and has been one of the most scientifically and technologically challenging problems around the world in the last century[1].In this project ,we investigate the use of data mining techniques in forecasting maximum temperature ,rainfall ,evaporation and wind speed,Humidity,Visibility, Sea level press. This was carried out using Decision Tree algorithms and meteorological data collected between 2013 and 2017. A data model for the meteorological data developed and this was used to train the classifier algorithm. The result of these algorithm were compared and the algorithm which gave the best results used to generate classification rules for the mean weather variables.This Weather forecasting App is more efficient than existing methods. The results show that given enough case data, Data mining techniques can be used for weather forecasting and climate change studies				

Paper ID: 177	**Title:** Automated Detection of Dermatological Disorder through Image Processing and Machine Learning			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Sameer Jadhav	Hiren Kashodriya	Neel Parmar	Ameya Kamble	
Abstract: Dermatological disorder is one of the biggest skin related disease due to its highly complex and expensive diagnosis. In case of fatal diseases like Melanoma, Eczema, Psoriasis, etc the application of automated methods will help in early detection of dermatological diseases through lesion images, a machine intervention. Our model will be designed into three phases, data collection, designing model and finally prediction. We will be using AI algorithm like Convolutional Neural Network (CNN) and will combine it with image processing tools such as grey scaling, blurring, sharpening, reducing the noise and smoothing to form a better structure and accuracy. Disease is predicted as an output.				

Paper ID: 178	**Title:** Hand Gesture Recognition To Speech Conversion			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Ankit Vaity	Dhruv Vaghela	Afreen Shaikh	Rajvi Makwana	
Abstract: Inability to speak is considered to be a true disability. In our system, we intend to overcome this disability by capturing hand gestures performed by the disabled and giving text and speech as output. This will not only help the mute people but also deaf and blind ones to communicate with anyone around. Our system will contain a manual of our own gestures which will be categorized depending on the situation they are most likely to be used in hence making it easier for the user to convey his message.				

Paper ID: 179	**Title:** Website Protection and Analysis using Dedicated Security Tool			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Priyank Patil	Deepesh Warghade	Nileema Pathak		
Abstract: The number of users using the World Wide Web has crossed 3.8 billion and the number is increasing day by day. Today the Internet touches all aspects of our life, education, and economy. There has been a significant increase in the hacking of websites on a daily basis due to the vulnerabilities present on the websites. According to White Hat security's "2018 Website Security Statistics Report, " more than 60 percent of websites had at least one serious and exploitable vulnerability open throughout the year – meaning the doors to easy exploits were wide open. It has become highly essential that each website should have a security measure in place. The main research goal of this paper is to overcome this challenge by presenting a tool which can present an analysis of websites and protection of websites from hackers.				

Paper ID: 180	**Title:** Bicycle Pooling Services: An Android Application			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Swagata Nan	Kritika Dadarkar	Rajeshwari Jadhav	Divya Kumawat	
Abstract: In recent years, bicycle-sharing systems have been widely deployed in many big cities, which provide an economical and healthy lifestyle. Our project is based on an android application which provides bicycle on both sharing and rental basis. A key aspect of this system is that it does not involve intermediaries between users and bicycle: reserving, acquiring and releasing a bicycle are all done automatically through software running on the system of a user's smartphone. It provides bicycles for short-term trips on sharing basis. A typical bicycle-sharing system includes a communal stock of sturdy, low-maintenance, bicycle distributed over a network of parking stations. It helps in reducing traffic congestion as well as to experience a healthy inhabit. This paper discusses the design and implementation of Bicycle Pooling Services, which is a bicycle rental system that involves reserved parking stations.				

Paper ID: 181	**Title:** Augmented Reality Based Direction Guide			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Akshay Gupta	Sachin Gowda	Ashish Chandanshive	Prathamesh Sawant	Prof. Prajakta Borole
Abstract: Usage areas of cell phones have expanded in the last 10 years.Although there have been enhancements in numerous regions, the majority of the advancements are in the field of positioning systems. In spite of the fact that the general population invest more time in indoor situations, area based data framework gets information from the satellites, which can distinguish an individual's area in outdoor regions. In indoor regions, satellite flag examine cause false data or can be hindered by the articles in the zone. In this proposed framework, an indoor route framework has been planned and built up that just uses the accelerometer, gyroscope,the camera and the compass segments on the telephone and does not require satellite signs for situating. To provide independence from the map in this application, augmented reality is applied during the routing process by utilizing built-in camera of the phone and no map is used.				

Paper ID: 182	**Title:** An Android Application For Protecting Personal Information Using Fingerprint Encryption			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Rinisha Burriwar	Sayli Dhotre	Snigdha Bangal	Supriya Mandhare	

Abstract: In developing countries like India there is strong focus on data security. New encryption algorithms and software's are built every year. The maintenance of these encryption systems is many times overlooked. Whenever personal information breaches so many people and companies get affected by the huge loss. This happens because while building encryption algorithms its feasibility and security is neglected, and because of this the amount of personal data breach increases. As data security plays an important role for securing chunks of data and personal information there's a need to develop a proper encryption algorithm. So we are developing a software that will secure the personal information of user like user's bank details (account number, ATM pin), social networking sites password (Face-book, Gmail) etc. So we need to create a software that will encrypt the user's personal information by user's fingerprint and decrypting the same information by user's fingerprint .Here, we need to use the most effective algorithm to encrypt the information and fingerprint hash values and provide security to the user's sensitive information .Even if the mobile gets stolen, the thief cannot have access to this sensitive information. Even if the data is visible to any person he/she cannot do anything to the data as it would be in an encrypted form and the key to that data will only be known to the owner of the mobile.

Paper ID: 183	**Title:** A Review on Hybrid Electric Vehicle				
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**	Author6:
Garima Gurjar	Shreyashi De	Priynka Sharma	Priyanka Tripathi	Pragya Jain	Rashmi Chaugule

Abstract: With growing oil prices and escalating environment worries, cleaner and supportable energy solutions are demanded. Present transportation contributes large amount of energy consumption and emission of pollutants. In this paper, hybrid vehicle technology has been analyzed, with Power split configuration having internal combustion engine and battery as the power source. Initially the analysis of hybrid electric vehicle performance is done with battery of higher amp-hr capacity .In advanced state the converter circuit is implemented to reduce the battery rating. Different cases have been observed with different charging and discharging circuitry of battery. Hybrid electric vehicles are admired because of their ability to achieve related performance to a standard automobile while prominently improving fuel efficiency and tailpipe emissions. Having a great control of ANFIS controller in power system and machine rather than other controller, motivate us to interface this controller in hybrid electric vehicle. An improving effect can be visualized from the simulation results.

Paper ID: 184	**Title:** Electrostatic Precipitator using Van de Graaff Generator			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Kavan Raval	Ashwini Khedekar	Rushikesh Shinde	Saurabh Warekar	Priyanka Sharma

Abstract: In many industrial plants, particulate matter created in the manufacturing process is released as dust in the hot exhaust gases. If such matter is released into the atmosphere, the particulates reduce visibility and it contributes to climate change as well as serious health problems in humans. Fine particles that are smaller than 2.5 microns in diameter can be especially dangerous because they are drawn deep into the lungs and can trigger inflammatory reactions. Therefore, the aim of the paper is to present an electrostatic precipitator which uses an electric charge that is provided by a Van de Graaff generator. The pumped charge from the generator will remove such impurities from air or other gases in smokestacks and other flues.

Paper ID: 185	**Title:** Fully Automated Solar Grass Cutter Using IOT			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Akshay Sawant	Omkar Haldankar	Saurav Pingale	Sachin Bhat	Garima Gurjar
Abstract: The solar lawn mower is a fully automated grass cutting robotic vehicle powered by solar energy, it also avoids obstacles. It is also capable of fully automated grass cutting without the need of any human intervention. The system uses 12v batteries to boost the bot movement motors as well as the grass cutter motor. Battery is charged by solar panel . The cutter and its motors are interfaced to an Arduino Nano that controls the working of all the motors. Ultrasonic sensor is used for object detection. The SoC moves the bot in the forward direction in case no obstacle is detected. On obstacle detection; the ultrasonic sensor monitors it and the SoC thus stops the grass cutter motor to avoid any damage to the object/human/animal whatever it is. In order to know the battery charged and how much power is generated through the solar panel voltage divider circuits are used with the microcontroller and the data is passed to blynk app using Wifi Module. We can also control the robot using blynk app or also it can be set on Auto Mode. The L293D9 bi-motor controller/driver is used.				

Paper ID: 186	**Title:** Project Feature Extractor			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Krina Rathod	Rohan Parab	Yash Chaukekar	Prachi More	Yogita Shelar
Abstract: Feature Extraction is a facet of Text Mining that is gaining exponential popularity due to the information explosion on the Internet. It is imperative at this point to explore this domain so as to develop systems that make it easier to understand the vast data by summarizing it. Text Summarization can be performed by abstraction and extraction. Our proposed system makes use of the extraction approach. Summarization by extraction is the process of identifying important features of the document as well as extracting the sentences on the basis of their score or weight. In our proposed system, we consider research papers as input, perform different preprocessing techniques, then use six features to calculate the weight of each sentence to get a short summary as output.				

Paper ID: 187	**Title:** Computational platform for integration of cellular services and modules to create dynamic profiles permitting trigger automation			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Nikhil Gohil	Bhagyesh Kurlekar	Vatsal Agrawal	Suvarna Pansambal	
Abstract: There are a lot of features along with other amenities in smartphones which can be effectively used along with some customization to increase the overall throughput of the phone. Using customizable profiles which are user-friendly may save a lot of time and efforts to carry out the same tasks repeatedly if the users are given access to them. If users are given access to create their individual profiles which can be made to carry out their tasks according to their comfort, it will definitely be a great boon for the tech-savvy people as well as naive users who are willing to utilize technology to its fullest potential. The burgeoning rate of Android phones with added features in the current market is tremendous. Along with all these added features for users to make the phone more user-friendly, it sometimes becomes a crucial task to carry out all of the functions and tasks repeatedly for doing the same thing. This will be an Android Application which will be developed using Java and XML for implementing the functions and for building the front-end respectively.				

Paper ID: 188	**Title:** Sentiment Analysis of Tweets Using Semantic Analysis			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Snehal Kale	Pankaj Kadam			
Abstract: In today's world, there is endless stream of data present online and the automated analysis of such data holds a great promise in business analytics for providing a strong support in decision making. This paper looks at the very heart of the concept of sentiment analysis by classifying the tweets with the help of algorithms like Naïve Bayes, Maximum Entropy, and Negation. In this paper, we first preprocess the tweets to remove unnecessary content in tweet; we then extract the adjectives which forms the feature vector, which are also used to find synonyms used in further semantic calculations in aforementioned algorithms. Finally, we calculate Accuracy, Precision, and Recall to compare these algorithms.				

Paper ID: 189	**Title:** Compromising Smart Television			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Mohan Kumar	Manoj Mishra	Bhavin Shah	Nilesh Gode	Kunal Shriwas
Abstract: Smart Televisions are offering an ever-growing number of features such as Internet access, media player's built-in cameras and microphones. They are physically placed in sensitive locations and connected to trusted home and business networks. Smart Televisions use the same operating systems and software as regular Personal Computers, leaving them vulnerable to attacks. Security updates are provided less frequently. As these systems are closed, it is difficult for users to find out and examine if the TV has been compromised. This paper shows us that Smart Televisions must not be considered trust worthy. They pose a severe security and privacy threat. We show that the integrated media player is highly vulnerable.				

Paper ID: 190	**Title:** Challenges in the deployment of 5G Networks in India			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Prof Nilesh Gode	Dr. Bhavin Shah	Prof Mohan Kumar		
Abstract: Telecom sector in India has to compute with the world and bring Innovation with advent of new technologies. 5G deployments start globally and India also must have to start the deployment process in coming years. 5G will provide enhanced connectivity and help in digitizing various industrial verticals. In this paper we are going to discuss about the specifications of the 5G, architecture of 5G network, spectrum requirements for 5G and finally try to identify the challenges for 5G deployment in India				

Paper ID: 191	**Title:** Bridge safety monitoring system			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Aditya Kolte	Manas Naik	Divesh Chonkar	Sumita Chandak	Nileema Pathak
Abstract: India being a developing nation , a strong focus in given on the infrastructure. There are many new bridges that are under construction and many are built year after year. The maintenance of these bridges is many times overlooked. Whenever bridge collapses so many people lose their family member. This happens because there is no application which will send the alert message to the user when the movement of the bridge is detected or when the bridge is collapsed. And because of this the amount of accidents happened because of the collapsing of the bridge never decreased. As the bridge is so much important, because of the bridge the people can reach to their home, cross the rivers etc. So the safety of that bridge and the people who are using that bridge is also important. This sense of safety helped create our device-Bridge safety monitoring system that will reduce such accidents and save lives of lot of people. Many long span bridges in Korea and in Japan have adopted this real-time health monitoring system. In this, a new idea of bridge health monitoring system is introduced. For short distance TCP/IP wireless network is tested, and CDMA/GSM for long distance data communication is tested				

Paper ID: 192	**Title:** Salient Schemes for Data Analysis			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Chandana Nighut	Samira Nigrel	Sushma Amudalapally	Nida Parkar	
Abstract: In the digitalization era, the data is no longer scanty, its robust. Hence to enable an Organisation or a firm to access the data skillfully and easily, the data needs to be sifted and sorted. Data analysis is the process of evaluating data using logical & analytical reasoning to examine each component of the data provided. This paper presents various schemes/ methods to analyze widespread range of data.				

Paper ID: 193	**Title:** 5G Wireless Technology			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Manoj R. Mishra	Mohan Kumar	Bhavin Shah	Nilesh Gode	Kunal Shriwas
Abstract: The 4G technology has been deployed in so many countries but have some issues related to spectrum & energy consumption.5G is the name being to the next generation (4G) of the wireless network which can solve the issues like spectrum & energy consumption.5G gives faster data rate. It is very useful in various consumer & industrial applications. Standardization of 5G network is a great challenge in front of many cellular networks nowadays. There are already multiple groups working to come up with standards around interoperability, backward compatibility with older technologies (4G, 3G). The main features in 5G mobile network is that user can simultaneously connect to the multiple wireless technologies and can switch between them. Radio technologies have evidenced a rapid & multidirectional evolution with the launch of the analogue cellular systems in 1980s.Thereafter, digital wireless communication systems in 1980s with the commencement of TDMA & FDMA Cellular Networks.				

Paper ID: 194	**Title:** Analogous investigation of Most commonly used Machine Learning Tools			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Aruna Pavate	Divya Kumawat	Survana Pansambal	Apeksha Waghmare	Anita Chaudhari
Abstract: This paper provides an general idea of the most commonly used machine learning tools from a practitioner's perspective. Essential services of these tools are described as well as a comparative examination of these tools represented. Machine learning is the field most commonly used in many Industries including academics, gaming, designing expert system, and government institutions, Image Recognition, Medical Diagnosis, Financial Services, Marketing & Sales, Transportation Services, Other Bio-metrics, Safety and Security etc. There are plenty of tools supports to design and experiment our work It is necessary to know the details of the tools available and how we can utilize.				

Paper ID: 195	**Title:** Currency Converter Using Computer Vision			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Vaibhav Gondane	Shantanu Gode	Yuvaraj Nagi	Chandana Nighut	
Abstract: Whenever we travel abroad and think about going to purchase any merchandise, we always have to convert the foreign currency value to that of the current rupee value. The following can be implemented using various currency converter apps or google itself but using computer vision the user has to just flash the merchandise tag in front of the camera and the price conversion would be automatic in front of the user on the very same screen. For the development of the application we divided the application into different modules where every module has its own functionality and independence .The application includes information about currency rates and the after result of the converted currency as well. To perfectly implement the app we will have to use Computer vision and AR technology				

Paper ID: 196	**Title:** Survey on Advanced Databases			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Forum Shah	Tanvi Kapdi			
Abstract: In the period of web, when information creation has gone off-limits, associations are confronting an intense test in terms of handling, breaking down and putting away huge information. The major downside with this information is that it isn't just being made at a exceptionally quick pace however it is likewise unstructured for example does not have a fixed schema. Besides it is emerging from divergent and discrete sources, for example, the online life. No Sql or Not Only Sql databases offer an exceptionally adaptable and evenly versatile answer for store organized, semi-organized and unstructured information. These databases store information as key-esteem a set which offers better accessibility and high throughput execution as far as preparing inquiries. They are intended to be profoundly adaptable as indicated by the client's necessities, and well appropriate for the necessities of the overlying application just as the hidden information being put away. This paper gives a general information of the databases to store any type of data.				

Paper ID: 197	**Title:** Cued Click Point Based Authentication			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Suvarna Pansambal	Apeksha Waghmare	Aruna Pavate	Divya Kumawat	
Abstract: Usable security has unique usable challenges because the need for security often means that standard human-computer-interaction approaches cannot be easily directly applied. An important usability goal for authentication systems is to support users in selecting better passwords. Users often create memorable passwords that are easy for attackers to guess, but strong system assigned passwords are difficult for users to remember. So researchers of modern days have gone for alternative methods wherein graphical picture are used as passwords. Graphical passwords essentially use images or representation of images as passwords. Human brain is good in remembering images than textual character. There are various graphical password schemes or graphical password software in the market. However, very little research has been done to analyze graphical password that are still immature. In this paper, Users click on point per image for a sequence of images. The next image is based on previous click point. Performance was very good in terms of speed, accuracy and number of errors. Users preferred CCP to pass point, saying that electing and remembering only one point per image was easier and that seeing each image triggered their memory of where the corresponding point was located. CCP also provides greater security than Pass Points because the number of images increases the workload for attackers.				

Paper ID: 198	**Title:** Background verification and data analysis			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Utsav Shah	Dhaval Vasant	Shubham Shinde		
Abstract: Xverify is a web-application that will verify background of individuals as well as companies. It will find the credit score/ credit health of individuals. This product will help customers with the credit and financial health check of spouses, their family, their employers, recruiters, etc. so that they will be assured of a bright financial future together. After all, getting into marriage or business is one of the biggest decision of one's life. It will also provide trust and transparency to the entire process. Xverify brings the offline verification system online, powering the individuals with quick and hassle free access to information and results.				

Paper ID: 199	**Title:** Study of Data Mining techniques for credit risk analysis and risk analysis by using decision tree algorithm			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Divya Kumawat	Aruna Pavate	Apeksha Waghmare	Suvarna Pansambal	
Abstract: Banks fundamental business model depends on financial inter mediation by raising finance and lending (mortgage, real estate, consumer and companies loans). Consumers and companies loan is one the major source of income for banks. Some risks are always involved in lending loan to Customers. This paper lists different data mining algorithms with its uses.It also present a model to predict Credit defaulters as well as loan pay ability of person requesting loan by using data mining techniques. The system uses ID3 algorithm to identify credit defaulters. It also undergoes training to generate the rule set.				

Paper ID: 200	**Title:** BrainQAn e-learning Applications			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Gajanan Desai	Prachi Palvi	Anup Maurya		
Abstract: Most universities in India face many educational problems and obstacles that technology can help to overcome. In an IT and software industry, new and improved technologies are always on the rise. And when talking about education there has always been a speculation of how can we use the format of applications to benefit the educational field. Also using these for commercial purpose has always been upfront. We have to keep ourselves updated with the ongoing demand, in order to develop an effective product for commercial use. We have a more crucial role to play to ensure an application's efficient working, as almost all of the books and exam, today, is online. This paper shows that the use of interactive features of e-learning increases the motivation of the undergraduate students for the learning process.				

Paper ID: 201	**Title:**Review of Reactive power compensation using STATCOM			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Kaveri Patil	Ankita Purkar,	Ankit Mudpe	Shubam Pandita	
Abstract: This paper introduces various methods of reactive power compensation in power system. The study of shunt connected FACTS (Flexible AC transmission system) devices is a connected field with the problem of reactive power compensation and better mitigation of transmission related problems in today's world. In this paper the study of STATCOM, its principle of operation and control is done. This paper describes the PWM technique as a control strategy using instantaneous reactive power theory (PQ theory). STATCOM besides compensation is also used for improving system stability, Improve Power Transmission Capability of Transmission and Distribution Lines, Reduce Line Losses which is achieved through implementation of various control algorithms, switching techniques which have been reported in the literature..				

Paper ID: 202	**Title:** WSN for ICE			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Nileema Pathak				
Abstract: Internet of Everything aims at achieving connectivity not only to laptops or hand held devices but to a wide range of devices that are a part of our environment. IOET can be referred to as an intelligent connection of sensors, data, connectivity, things, people, and process so as to make the world a smarter and better place to live. This connected environment generates a huge amount of data that can be used effectively for the benefit of mankind .In this paper we will be foreseeing the challenges in the process to achieve this goal..				

Paper ID: 203	**Title:** A Real-time Immersive Experience Of Chess in VR			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
ShubhamVengurlekar,	Shubham Rane,	Pranav Lokhande	Ajeet Ghodeswar	
Abstract: The system which we aim to create is a VR game, which creates a cinematic and immersive experience for the player while playing a game of chess. The final game would be played on an Android smartphone. To experience the game in VR, player needs to use a VR Headset like GearVR, Google Day-dream-view. Our concept is basically a combination of the aesthetically attractive aspect of technology and the basic but intelligent game of chess, it is an android application which used wireless VR headset and a wireless VR remote as a controller of the game to immerse the players into the detailed and graphically created environment.				

Paper ID: 204	**Title:** Bus tracking system using Android and web application			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Sanket Panchal	Mayur Kharat	Pooja Walve	Suyog Kadge	Manoj Mishra
Abstract: Transportation becomes very difficult in cities like Mumbai. The public transports, especially BUSES are developing around the globe. Such public transports reduce the usage of personal vehicles so reducing fuel consumption and mollifying traffic congestion. The problem with BUSES is that the commuters DO NOT know the exact temporal arrangement of arrival of BUSES at their stops. This leads to looking ahead to BUSES for 30-35 minutes because the commuters are not aware at what time exactly the BUS is to arrive. The approximate arrival time of BUSES is known but there could also be delay in arrival thanks to traffic. Seeing that people started avoiding public transports and started victimisation non-public vehicles, many applications were developed; but these applications were unable to mitigate the problems. Some applications provided only the arrival time and point in time of BUSES at their supply and destination. Some of them, provided time-tables, but even they weren't correct as they failed to contemplate the delay thanks to unpredictable factors like – traffic, harsh weather situation, etc. The time-tables were not timely updated leading to waiting for BUSES				

Paper ID: 205	**Title:** FOOD CALORIE AND NUTRITION MEASUREMENT			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Sejal Patil	Grishma Mehta	Chetan Roge	Disha Bhosle	
Abstract: As individuals all around the globe have begun taking an unmistakable fascination for keeping up a fit way of life, eating increasingly solid sustenance, and maintaining a strategic distance from corpulence, a framework that can quantify calories and nourishment in consistently suppers can demonstrate be extremely valuable. In this paper,a sustenance calorie and nourishment estimation framework that can support any individual, may it be tolerant or a specialist, to gauge and oversee day by day sustenance admission has been proposed. This framework is based on nourishment picture preparing and utilizes dietary certainty tables. Late years have seen an expansion in the use of individual versatile innovation, for example, cell phones or tablets, and so forth which clients convey with them for all intents and purposes constantly. Utilizing an extraordinary alignment method, this framework utilizes the implicit camera of such cell phones and records a photograph of the nourishment when eating it to gauge the utilization of calorie and supplement segments. The exactness of this framework is adequate as demonstrated by the end yield results and it will incredibly improve and encourage current manual calorie estimation strategies.				

Paper ID:206	**Title:** Plant Health Monitoring System using Image Processing			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Parth Chitroda, ,	Mohmed Anis Agwan	Aniket Hulamajge	Snigdha Bangal	
Abstract: During the course of this project we made an attempt to scale down human labour by creating a system which is able to indicate plant health. Essentially the aim of this project is creating a monitoring system which is able to work on the following principle which indicates the plant health by observing colour of their leaves. Disease detection involves the steps like image acquisition, image pre-processing, image segmentation, feature extraction and classification. The system will note encompassing environmental conditions like temperature, humidity, moisture etc. and it'll be displayed on LCD display and image processing is used for the detection of plant diseases.				

Paper ID: 207	**Title:** Mumbai Tour Application development by using Augmented Reality			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Aditya Mohite	Mangesh Sonje	Omkar Chikhale	Neha Singh	
Abstract: Augmented Reality is a breakthrough technology that could considerably ease execution of complex operations. Augmented Reality mixes virtual and actual reality, making available to the user new tools to ensure efficiency in the transfer of knowledge for several processes and in several environments. Augmented Reality can be explored in many ways viz; Education, Medical Science, Construction and Development, Scientific Visualization etc. But it is not been used in the field of Tourism. Virtual Mumbai approaches augmented reality such that it provides pragmatic models of the places a person visitsransparency in its operations.				

Paper ID: 208	**Title:** Analysis of Major Power Systems Blackouts			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Priti Singh				
Abstract: The present paper consists of analysis of 10 most sever blackouts that occurred in the history of power system network				

Paper ID: 210	**Title:** Walkthrough: Augmented Reality in Education			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Samira Nigrel	Chandana Nighut			
Abstract: Education industry is moving from two dimensional media training to three dimensional media training with the help of AR technology. With the help of this students can learn real life scenarios effectively and in attractive manner. Augmented reality is the integration of digital information with the user's environment in real time.AR combines aspects from ubiquitous computing and social computing. This paper gives brief about the technology of augmented reality (AR) and its uses in education domain.				

Paper ID: 211	**Title:** A Review on Application of Nanotechnology			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Dipa Patel	Pravin Nemade	Bhushan Sonawane	Priyanka Patel	Dr. Ramesh Yamgar and Mrs. Abhilasha Saini
Abstract: Nanotechnology is serving appreciably to enhance, even recasts, technology and industry sectors: information technology, energy, environmental science, medicine, food and agriculture, transportation. Today's nanotechnology tackles current progress in chemistry, physics, material science, and biotechnology to design unique material which possess novel properties as their structures are persistent on the nanometer scale. This paper analyses few of the various applications of nanotechnology.				

Paper ID: 212	**Title:** Passwordless Login Using Two Factor Authentication				
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**	**Author6:**
Hetanksha Desai	Shantanu Phadke	Jyothi Arun			
Abstract: This work contributes in the structure and usage of a creative secure verification strategy which uses a QR code; an open source evidence of-idea confirmation framework that utilizes a two-factor validation - QR code utilizing IMEI number and advanced watermarking. QR code is amazingly secure as all the delicate data put away and transmitted is encoded; anyway it is additionally simple to utilize and cost-effective arrangement. In the QR code a mind boggling secret key is put away. Advanced mobile phone is utilized for filtering the QR code. The code is examined with the QR code scanner. Checking result produce one string which is the blend of IMEI number of a telephone which is enlisted by the client and the irregular number. As infections and breaking strategies become progressively intricate and ground-breaking step by step, the accessible security procedures must improve also, enabling clients to ensure their information. Our point is to build up a confirmation technique utilizing a confided in gadget (a cell phone) that will use a QR code which will go about as a verification token					

Paper ID: 213	**Title:**Smart Farm Using Internet of Things in Agriculture			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Anushka Gothankar	Gopalkumar Jangid	Rajat Kamble	Prof.Sumita Chandak	
Abstract: The Internet of Things (IoT) is a revolutionary technology that represents the future of computing and communications. Most of the people all over the world depend on agriculture. Because of this reason smart IT technologies are needed to migrate from traditional agriculture methods to modern methods. Using modern technologies can control the cost, maintenance and monitoring performance. Precision agriculture sensor monitoring network is used greatly to measure agri-related information like temperature, humidity, water level etc. So with IoT, farmers can remotely monitor their crop and farming equipment and automatic irrigation is done by phones and computers using mobile computing and cloud computing. Recommendation of crops can be done using data mining. Also, plant diseases are identified using image processing.				

Paper ID: 214	**Title:**A SECURE BLOCKCHAIN- BASED ELECTRONIC VOTING SYSTEM			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Neel Patel	Ruchir Mumbarkar	Jay Desai and	Amruta Pokhare	
Abstract: Blockchain is offering new opportunities to develop new types of digital services. While research on the topic is still emerging, it has mostly focused on the technical and legal issues instead of taking advantage of this novel concept and creating advanced digital services. We are going to leverage the open source. Blockchain technology to propose a design for a new electronic voting system that could be used in local or national elections. The Blockchain-based system will be secure, reliable, and anonymous, and will help increase the number of voters as well as the trust of people in their governments.				

Paper ID: 215	**Title:**Android Based Application For Smartphone Addiction Control And Monitoring			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Kshitij Chavan	Varun Bhalerao	Aditya Devare	Vrushabh Mangade	Priyanka Sharma
Abstract: Recently, a large number of cases have been reported about people getting addicted to the use of smartphones. With the ever increasing influence of social media, people spend a lot of time on such apps. Especially young children these days are given smartphones at a very young age. They may not understand what's good for them and what's harmful. In such cases over usage of smartphones leads to various problems such as lack of exercise,social anxiety,etc. In this project, we have tried to implement an application that basically uses two modules- a child module and a parent module. The parent module gets the overall usage analysis of the children, and the parents can decide if they want to put a specific limit on usage of a single app. If the child exceeds the limit,the app gets locked. They can unlock the app by indulging in various tasks for a specific amount of time. Not just the children,even adults can use this app for their benefit. As they would have more self control and rational thinking, they may not need any parent module and can use this app self-sufficiently. This ensures that people do not spend majority of their time in front of time consuming and addictive applications,but also indulge in self improvement through different tasks.				

Paper ID: 216	**Title:**MIXED REALITY FOR SPECIAL EDUCATION			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Tanvi Kapdi	Foram Shah			
Abstract: Special able students of our society needs equal opportunity to develop and participate to the society and grow financially. Virtual reality gives students with disabilities the opportunity to practice everyday "real world" skills in a safe environment. One of the biggest benefits to train students in this way is that students can learn from realistic scenarios without the risk of practicing an unfamiliar skill in an uncontrolled real-life situation. Students are even able to take virtual field trips, visiting places in their communities which they would not normally be able to experience. Based on the current research study and understanding it was found that MR systems would provide better applicability in their treatments.				

Paper ID: 217	**Title:**Library Management System with Smart Book shelf			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Bhumika Gor	Laxmi Baudh	Trupti Yadav	Sarang Kulkarni	
Abstract: As the quantity of libraries utilizing Smart library3 the board frameworks is expanding step by step, there should be appropriate security for insurance of books from robbery and abuse. Most libraries use either RFID1 or standardized tag in their backend. The login method to the library is mostly by means of RFID which can be effectively altered. Other route is through secret key based setup from PC. By utilizing a blend of RFID1 and unique mark, the security of the library can be expanded by a few dimensions. This paper exhibits a manner by which how the consideration of fingerprints will make the library increasingly secure.				

Paper ID: 218	**Title:**Android Based Tranquilizer equipped Wildlife Bot			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Rushmita Paul	Rushank Thakur	Akash Umtol	Parag Lokhande	
Abstract: The objective of this project is to ensure safe and uninterrupted monitoring of wildlife habitats and vegetation. Venturing into the wild can be dangerous, not only from wild ferocious animals but also the extremities of the harsh weather and climate conditions. This project also ensures that the watch over the animal is continued even in the night time. This is why we have made use of a night vision1 camera so that we can keep watch on the wild animals even at night. Wildlife observers need to get a close footage of wild animals by getting into their habitats. It is not always safe to get close to all wild animals. So for this purpose, we put forth this wildlife observation robot with night vision capability. This robot can be operated wirelessly by users using their android phones. The robot also has a wireless camera that sends the footage stream live wirelessly to the user. However, it is also necessary to study the habitat, behavioural characteristics and other features of wild animals, especially of those which are endangered and on the verge of extinction. It is enhanced with a tranquilizer gun to aid injured animals and IR sensor for checking the path of the robotic vehicle.				

Paper ID: 220	**Title:** A Survey on Routing Schemes of Delay Tolerant Network for Internet of Things			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Ruchi Chauhan	Shikha Malik	Susan Thomas	Pooja Sonawane	Jyoti Kolap
Abstract: Delay Tolerant Network (DTN) is meant to provide connectivity in heterogeneous networks which lack incessant connectivity due to disruptions or considerable delays ,one such network is Internet of Things (IoT). Internet of Things (IoT) is a domain which is being widely used by the industrial world and in daily human life. One of the most challenging constraint in IoT is prolonging network lifetime considering resource limitation and maintaining connectivity in order to deliver data all over the network to the final destination. These shortcoming of IoT devices motivated to study DTN routing algorithm which are based on Store Carry Forward Technique and seems to be an appropriate solution to handle intermittent connectivity, overcome resource constraint and network disconnection. Various DTN routing schemes are surveyed in this research and their advantages and limitations are discussed.				

Paper ID: 222	**Title:** Secure Patients Data Sharing Using Cloud and Profile Matching for Patients Recovery			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Aakash Nimgire				
Abstract: We design an application for mobile devices for providing confidential patients data. We introduce secure data sharing and profile a matching scheme for the mobile healthcare social networks in cloud computing .hence securely sharing data to the doctors. This project addresses the performance and security concerns of patient data by using IBPRE+ (Identity Based Proxy Re-Encryption +). The main purpose of the project is to provide necessary health information, routine care improvements, health intervention (Mobile Healthcare Social Networks) are created for connecting patients so that they could share health care information using their mobile devices and also connecting doctors and specialist for better healthcare. It is secure identity-based data sharing scheme for MHSN, which allows the patient to outsource their encrypted health records to Cloud Service Provider (CSP) with IBPRE technique and share them with a group of Doctors in a secure and efficient manner.				

Paper ID: 223	**Title:**Review on physical layer waveform designing for 5G Wireless Technology			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Shikha Malik	Ruchi Chauhan	Pooja Sonawane	Susan Tony	
Abstract: There has been major paradigm shift in cellular technology due to increase demand of mobile internet and Internet of things leading to the challenging requirements that includes very high carrier frequencies with high spectral efficiency and massive no of antennas for unlimited connectivity among the users. The multiple access techniques for waveform design has gained momentum at each cellular generation and has been key technology to distinguish different wireless systems. The 1G based on frequency division multiple access, transformed into Time division multiple access for 2 G, code division multiple access standard for 3G and orthogonal frequency division multiple access has become a dominant approach for Wi-Fi and LTE cellular standard. It is natural that transition to 5G requires enhanced technologies in signaling and multiple access formats. This paper presents overview of the proposed multiple access techniques for 5G mobile communication systems. Several contenders like universal time domain windowing OFDM, filter bank multicarrier FBMC, universal filter OFDM (UF-OFDM),Non orthogonal multiple access, Chaotic Cognitive radio OFDM systems are discussed and compared in terms of spectral effectiveness and Bit error rate performance.				

Paper ID: 224	**Title:**Study: Deep Reinforcement Learning Overview & Application			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Chanda Chouhan	Priyanka Sharma	Supriya Mandhare	Pragyamani Sharma	Nileema Pathak
Abstract: Reinforcement learning (RL) has made tremendous achievements, e.g., AlphaGo. Here I list (deep) RL applications in the following categories: computer systems, “science, engineering andarts”, finance, business management, healthcare, education, energy, transportation, autonomous vehicles, games, robotics, computer vision, and natural language processing (NLP). Games, robotics, computer vision, and NLP are intentionally put at the end, since there are too many recent papers in these areas. I list only a few papers for games and robotics, since they are traditional RL application areas, and many people are familiar with them..				

Paper ID: 225	**Title:**COMPARATIVE ANALYSIS OF EMOTION RECOGNITION USING FACIAL EXPRESSIONS AND SPEECH			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Niranjan Samudre	Chandansingh Rawat			
Abstract: The projected solution is aimed toward raising the interaction among humans and computers, therefore permitting effective human-computer intelligent interaction. The system is in a position to acknowledge six emotions (anger, boredom, disgust, fear, happiness and sadness). This set of emotional states is wide used for emotion recognition functions. In this paper we present the design of an artificially intelligent sys-tem capable of emotion recognition trough facial expressions. Three promising neural net-work architectures are customized, trained, and subjected to various classification tasks, after which the best performing network is further optimized. This paper analyzes the strengths and the limitations of systems based only on facial expressions or acoustic information.				

Paper ID: 226	**Title:**A Study of hierarchical Clustering Techniques			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Susan Tony	Pooja Sonawane	Ruchi Chauhan	Shikha Malik	
Abstract: Clustering algorithms classify data points into meaningful groups based on their similarity to exploit useful information from data points. They can be divided into categories: Hierarchical clustering and Partition clustering algorithms, Clustering algorithms based on cost function optimization and others. In this paper, we discuss some hierarchical clustering algorithms and their attributes.				

Paper ID: 227	**Title:**Study on Opinion mining and sentiment Analysis			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Priyanka Sharma	Pragyamani Sharma	Chanda Chouhan	Pranoti Nage	Jyothi Arun
Abstract: Sentiment analysis lets marketers to collect rich data on customer attitudes and opinions in real time. Marketers can also gather feedback on customer reviews as they occur without having to invest in lengthy and costly market research activities. Sentiment analysis results in better targeted marketing, brand-reputation protection and faster detection of opportunities and threats. Sentiment Analysis helps to build a predictive model for analyzing the impact of customer sentiments on product sales.				

Paper ID: 228	**Title:** Survey ON DIGITAL TRANSFORMATION WITH RPA			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Jyothi Arun	Vaishali Salvi	Priyanka Sharma	Nileema Pathak	Pranoti Nage
Abstract: RPA is the technology to manipulate data and to communicate with other digital systems & so on. It is to arrange computer software to act as ROBOT. According to the capabilities of employees, they can boost up the use of robotic process automation. Along with time and money which are two main factors which can be saved by the use of it. RPA "Robots" are same as industrial robots, as it provides improvements in accuracy and increases productivity as well. This transformational process helps people out from dull and repetitive tasks. Large number of industries can use these technologies. The emerge of technologies are based on the artificial intelligence workers. This will help to reduce the barrier to use automated products. People blend how they spend their time like never before.				

Paper ID: 229	**Title:** APP AS A COMMON PLATFORM FOR MULTIPLE TYPES OF DONATION			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Kunal Shriwas	Bhavin Shah	Mohan Kumar	Manoj Mishra	Nilesh Gode
Abstract: The Content-Based Image Retrieval (CBIR) techniques comprise methodologies to retrieve images over the image data set being studied according to the type of the image. The main purpose of CBIR consists in classifying images avoiding the use of manual labels related to understanding of the image by the human being vision. Numerous techniques have been developed for content-based image retrieval in the last decade. In this paper, we discuss some of the key contributions in the current decade related to image retrieval.				

Paper ID: 230	**Title:** Hybrid Movie Recommender Using Deep Learning: A Review			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Saswata Bhattacharya	Mitesh Vishwasrao	Abhijeet Sonar	Prof.Jyothi Arun	
Abstract: A common dilemma of our routine life while relaxing is to decide what content to watch. Sitting in front of TV seems like a futile exercise with no control and no remembrance of content that we consumed. We prefer a smart platform which understands your mood and preferences and not just run on predefined content. We will develop recommender system that recommends movies similar to a given input movie. To create the hybrid model, we accumulated the results of an autoencoder which learns content-based movie embeddings from tag data, and a deep entity embedding neural network which learns collaborative-based movie embeddings from ratings data.				

Paper ID: 231	**Title:** Heart Disease Detection Using Genetic Algorithm And Neural Network Based On Risk Factors			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Yash Kate	Rahul Avhad	Omkar Mayekar	Sachin Gavhane	Vaishali Salvi
Abstract: Heart disease is the top reason for the increasing deaths around the globe. Heart disease detection is carried out by using techniques such as Data Mining. They are widely used in systems for prediction and diagnosis. They discover hidden patterns as well as relationships from the data. The reason behind creating such applications is the leading cause of death due to heart disease. Mostly the systems developed before predict heart disease use data having parameters which are obtained from labs conducted by doing complex tests. Mostly there are no system that predicts heart disease based on risk factors such as age, hypertension, tobacco intake, alcohol consumption, etc. Such common factors are present in heart disease patients. These factors can be used effectively for diagnosis. Generally these would not help medical professionals but would be a great help to people as it would warn them about probable presence of heart disease. This would warn them before visiting a hospital or doing expensive medical check-ups. Therefore this paper put forwards a technique for probable prediction of heart disease using risk factors. The data mining tools used in this system are genetic algorithm and neural network. This system optimizes the neural network weights. This system was implemented in MATLAB.				

Paper ID: 232	**Title:** Survey on Data Mining			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Ashmita Shetty	Komal Gothwal			
Abstract: In this paper, data mining concepts are summarized. Data mining is the process of analyzing hidden patterns of data according to different perspectives for categorization into useful information, which is collected and assembled in common areas, such as data warehouses, for efficient analysis, data mining algorithms, facilitating business decision making and other information requirements to ultimately cut costs and increase revenue.				

Paper ID: 233	**Title:** Comparative study of Machine learning and Artificial Intelligence				
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**	
Shilpa Jaiswal	Jyoti Gurav	Kunal Shriwas	Akansha Bhargava	Shilpa Jaiswal	Ashok Yadav
Abstract: Artificial Intelligence and Machine Learning are the terms of computer science. This article discusses some points on the basis of which we can differentiate between these two terms. The word Artificial Intelligence comprises of two words “Artificial” and “Intelligence”. Artificial refers to something which is made by human or non natural thing and Intelligence means ability to understand or think. There is a misconception that Artificial Intelligence is a system, but it is not a system .AI is implemented in the system. There can be so many definition of AI, one definition can be “It is the study of how to train the computers so that computers can do things which at present human can do better.”Therefore It is a intelligence where we want to add all the capabilities to machine that human contain. Machine Learning is the learning in which machine can learn by its own without being explicitly programmed. It is an application of AI that provide system the ability to automatically learn and improve from experience. Here we can generate a program by integrating input and output of that program. One of the simple definition of the Machine Learning is “Machine Learning is said to learn from experience E w.r.t some class of task T and a performance measure P if learners performance at the task in the class as measured by P improves with experiences.					

Paper ID: 234	**Title:** Visualization and Analysis of 3D Scientific Data			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Pranoti Nage	Priyanka Sharma	Vaishali Salvi	Jyothi Arun	Pragyamani Sharma
Abstract: Non-destructive testing (NDT) is used in the industry to check for the properties of the material, internal flaws, etc. without cutting open the samples. Digital Radiography (DR), an NDT, is a form of x-ray imaging, where digital x-ray sensors are used. Advantages of DR include time efficiency, ability to digitally enhance and transfer images. In the proposed system, solid industrial objects like computer chip, reactor parts, etc. are considered. The proposed software converts these radiographs into tomographic images (virtual slices) as done in Computed Tomography (CT). CT is another powerful Non-Destructive Evaluation technique for producing 2D and 3D cross-sectional images of an object from the x-ray images. CT is widely used in the medical and in the industrial sectors. As the slices of the object can be viewed using the software, internal flaws, defects and the overall product can be observed. 3-D models of sample objects are reconstructed from the set of x-ray frames.				

Paper ID: 235	**Title:**Self Learning Braille Keyboard			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Jyoti Kolap	Chaitanya Rathod	Rushabh Acharya	Omkar Shinde	Yash Mehta
Abstract: The project consists of Braille keyboard and learner. A Braille learner enables visually impaired people to learn Braille. The learner consists of 6 vibrating motors arranged in a 3x2 matrix as a Braille cell. A Braille keyboard is specially designed and constructed to provide easy typing technology for the visually impaired. There are totally 6 logical sensing switches that are used for acquiring the characters. The whole keyboard works based on Braille system. There are also five other specially used switches like SHIFT (Number Alphabet toggle button), SPACE, BACK SENSE, CAPS LOCK and SPEAK. This keyboard is a device made of logical switches and uses Braille system technique for sensing the characters. In this system, the sensors are aligned according to the Braille language i.e. alphabets or numeric/special characters. The main advantage of this project is that the visually impaired will also get to learn Braille and can also use this as a keyboard to type. This keyboard is interfaced with a computer in a similar way to that of the primary keyboards that are available Keywords: Visually impaired, hardware keyboard, See thro' touch, logical switches, Rows & Column sensors, modes of operation Braille language).				

Paper ID: 236	**Title:** Performance Analysis of Routing Protocols in MANETs			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Roshni Inamdar	Afzal Siddique	Omkar Sawant	Jyoti Kolap	
Abstract: Mobile ad hoc networks (MANETs) are networks that consist of wireless nodes. These nodes are mobile and self-configurable. MANETs do not have any fixed infrastructure. Due to its dynamic nature, nodes can be added or removed at any time. The performance requirements of such a network depends on the routing algorithms used. Thus, the routing algorithms are a crucial part of designing this specialized network. This paper presents performance evaluations and analyses for two routing protocol types: Proactive and Reactive routing protocols. This paper shows the produced simulation results after evaluating the normalized routing load, packet delivery ratio, throughput and average end-to-end delay of a MANET under two different scenarios viz. variation in number of nodes and velocity of nodes. Lastly, a calculated conclusion of the simulation results will be presented.				

Paper ID: 237	**Title:** QR code based Railway e-Ticket			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Apeksha Waghmare				
Abstract: We propose to build a unique and easy to use local train ticketing system. The system allows users to enroll and as soon as they register themselves with unique id is created in the system. User may book tickets for western central and harbor lines of Indian railway and fare is calculated according to distance between stations. This fare balance is later deducted from user account. User may later recharge his account through an admin. Here we use the server on a station. Android devices coming in Wi-Fi range of the server may book tickets. Our system allows users to thus book tickets through their android device. This system not only allows booking train tickets for western, central or harbor lines individually but also can get train or bus pass for BEST, NMMT, KDMT, MBMT, via this system. The user needs to enter his required details along with the source and destination station online. After filling the required details, the user receives a unique id. The user just needs to show this id to the ticket checker. The Ticket Checker enters this ID in his android application and thus can retrieve the user details like the photo of the person, source and destination of the pass, validity of the pass etc.				

Paper ID: 238	**Title:** Storage Management using Blockchain			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Amar Pendhari	Tej Patel	Burhanuddin Rampuravala	Foram Shah	
Abstract: Blockchain technology is known to be the driving force of the next fundamental revolution in information technology. Cloud data is metadata that records the history of the creation and operations performed on a cloud data object. Secure data provenance is crucial for data accountability, forensics and privacy. In this paper,in the proposed system a smart contract will store the metadata like the file size, type of file, created timestamp, updated timestamp, deleted timestamp, and the hash of the file which will act as a unique identity of the file. This unique identity will help us to fetch the file and will be the proof that the file was not tampered with. The data is stored on a peer-to-peer network of nodes, using a data structure called Directed acyclic graph. DAG breaks the files and stores it in small pieces across the nodes. The storage system makes the files available even if central websites go offline or government authorities censor the content. One can also get a good network speed as it gets the file from the node that is closer to you.				

Paper ID: 239	**Title:** Analysis of Trends in Wireless Body Area Networks (WBAN)			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Pooja Sonawane	Susan Tony	Shikha Malik	Ruchi Chauhan	
Abstract: The extreme development of the wireless networks and the constant miniaturization of electrical invasive and non-invasive sensors have led to a drastic change in the e-Health Environment .Without any constraint in daily activities ,efficient health monitoring is now possible including the Biofeedback and Assisted Living . Wireless Body Area Network (WBAN) is a new trend in the technology that allows the user to monitor his/her bio medical data.The data could be Heart Rate ,Breath rate, Sleep management etc .The WBAN system integrates several bio-sensors on a platform to analyze the health informatics of the End Users .The Wban Device is flooding the Consumer market offering varied functionality from activity tracking and mobile connectivity to medical monitoring. This paper provides a dynamic insight to the Wearable Technology and Challenges faced to Optimize Performance .It also exposes the fireworks on global Consumer Segments.				

Paper ID: 240	**Title:**ARTIFICIAL NEURAL NETWORKS WITH PPLICATION			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Jyoti Gurav	Shilpa Jaiswal	Akansha Bhargava	Supriya Dicholkar	J Ashok Yadav
Abstract: ARTIFICIAL NEURAL NETWORK INTRODUCTION The simplest definition of a neural network, more properly referred to as an 'artificial' neural network (ANN). ANNs are processing devices (algorithms or actual hardware) that are loosely modeled after the neuronal structure of the mammalian cerebral cortex but on much smaller scales. A large ANN might have hundreds or thousands of processor units, whereas a mammalian brain has billions of neurons with a corresponding increase in magnitude of their overall interaction and emergent behavior. Although ANN researchers are generally not concerned with whether their networks accurately resemble biological systems, some have. For example, researchers have accurately simulated the function of the retina and modeled the eye rather well. Although the mathematics involved with neural networking is not a trivial matter, a user can rather easily gain at least an operational understanding of their structure and function. Neural networks have seen an explosion of interest over the last few years and are being successfully applied across an extraordinary range of problem domains, in areas as diverse as finance, medicine, engineering, geology, physics and biology. The excitement stems from the fact that these networks are attempts to model the capabilities of the human brain. From a statistical perspective neural networks are interesting because of their potential use in prediction and classification problems.				

Paper ID: 241	**Title:** A Software Defined Network for IOT			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Supriya Dicholkar	Deepthi Sekhar	Jyoti Gurav	Akansha Bhargava	
Abstract: Software-defined networking (SDN) is an architecture that aims to make networks agile and flexible which is used for network configuration and monitoring. With drastic growth of Industry 4.0, it is very difficult to manage IOT traffic manually. In software Defined Network, SDN controller which is brain of network management is kept in control plane and used for centralized network management. Software-defined networking provides dramatic increases in the flexibility and scalability of network management by decoupling the network“control plane”—the part of the system that controls where information is sent—from the “data plane,” the portion that forwards information to predetermined locations. With SDN centralized controller, prioritizing or even blocking specific types of packets with a granular level of control and security becomes easy. Data packet forwarding is carried out by data plane. SDN Applications are programs that directly and programmatically communicate their network requirements through SDN Controller via North Bound Interface (NBI) and SDN Datapath is used for forwarding and processing of data.				

Paper ID: 242	**Title:** The Internet of Nano-Things and Applications			
Author 1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Vaishali Salvi	Nileema Pathak	Jyothi Arun	Pranoti Nage	
Abstract: Internet of Nano-Things (IoNT) is interconnection of the nanoscale devices which are connected using existing network Internet. IoNT is derived from the merged concept of IoT and NANOTECHNOLOGY which are considered as a new revolution with a huge popularity in the world of modern wireless telecommunications. IoNT is the combination of IoT and Nanotechnology which is a new revolution and has transformed the use of the Internet. IoT connects various types of objects, sensors, and devices that can interact and form pervasive networks that enhance our daily lives. Next generation standards based on IoT called (IoNT) are set up for various applications in which nanotechnology is providing effective solutions. Various fields benefited from this technology include military, agriculture, medical industry and smart cities.				

Paper ID: 243	**Title:** Efficient Privacy Preserving Machine learning in hierarchical distributed system			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Chourasiya	Sumer Bhawar	Raj Mourya	Deep Shah	
Abstract: The growth of data in both amount and scale, distributed machine learning has become an important tool for the massive data to finish the tasks as prediction, classification. However, due to the practical physical constraints and the privacy leakage of data, it is infeasible to aggregate raw data from all data owners for the learning purpose. To tackle this problem, the distributed privacy-preserving learning approaches are introduced to learn over all distributed data without exposing the real information.				

Paper ID: 244	**Title:** CHILD SAFETY WEARABLE DEVICE			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Aakash Singh	Rinku Yadav	Ricky Sah	Ajay Yadav	
Abstract: This paper discusses the concept of wearable device for child safety. The purpose of this device is to help parents to locate their children with ease. Right now there are many wearable devices in market which help to monitor the daily activity of child and also use to find child using WIFI and Bluetooth which is unreliable source of medium between children and parents. The main highlight of this project is to have an SMS text enable communication between children and parent by using GSM and GPS Module. GPS is use to track the location and GSM Module is used for communication from one end to another end. The parent can send the text with specific keyword such as LOCATION, TEMPERATURE, DISTRESS SIGNAL,BUZZER. The wearable device will revert with text containing the real time accurate location of the children and also provide the surrounding temperature. The secondary measure implemented was using buzzer present on the wearable device which is activated by the parents via SMS and Text should display the SOS signal brightly and sound an alarm and help by the surrounding people.				

Paper ID: 245	**Title:** Tech-Integrated Engineering Curriculum using iMac Lab			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Neha Singh	Nisha Varghese	Sinu Mathew	Neha Kunte	
Abstract: Unlike the past times, Technology has its place in education, a major role in transforming the lives of the students and furnishing and grooming them to face the challenges in the outside world. It is important to go further and beyond the syllabus and acquire technical skills to apply our theory based knowledge. Thus, Atharva college of Engineering at Mumbai is committed to turn this into reality, by sowing the seeds of awareness by means of orientations, and later watering the budding seeds to grow them into saplings by means of organising technical workshops, which in turn keeps them updated with the latest technologies. ACE has been ambitious and also tried innovative ways to make learning interesting and to induce the thirst for learning more and more. College has a mixed cauldron of projects which has not only earned fame and recognition but also helped students to establish a concrete base for learning and experimentation. As a part of these innovation trends, our college has set-up a state-of-the art iMac Lab consisting of 20 iMacs, an iPad and an Apple TV. The Mac operating system has many eye popping features and along with its high security feature , it had taken over the majority of the market share..				

Paper ID: 246	**Title:** A research of Android e-learning applications			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Akshaya Satam	Rohan Gantellu	Paras Singh	Hetal Surti	Amruta Mhatre
Abstract: Most universities in India face many educational problems and difficulties that technology can help to overcome. In an IT industry, new and updated technologies are always on the rise. And when talking about education there has always been a talk of how can we use the various applications to benefit the educational field. Also using these for commercial purpose has always been a priority. We have to keep ourselves updated with the current demand, in order to develop an effective product for commercial use. We have a more important role to play to ensure an application's efficient working, as almost all of the books and exam, today, is online and less is offline. This paper infers that the use of interactive features of e-learning increases the confidence of the undergraduate students for the learning process.				

Paper ID: 247	**Title:** Smart Mirror: A reflective portal to increase productivity			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Pooja Patel	Mitesh Patel	Smit Ajmera	Smita Patil and	Charmi Chaniyara
Abstract: In order to effectively prepare for the day while staying updated with the necessary information and still maintaining a timely schedule is a perplexing task. This mirror provides an efficient way to manage all tasks by combining different services such as weather updates, time, date, news feed and to-do-list. When compared, the mirror will be much more efficient and faster way to gain information than other devices. Face recognition is used to allow access to authorized users and secure the mirror. The news feed uses web service-based communication to extract data packets offered through various different APIs that are made available by websites. All the required computing power is handled and managed by the raspberry pi. Additionally, the LCD display is used which is raspberry pi and placed behind the two-way mirror. Secondly, add-ons such as an assistant may require a microphone that will be used to control the mirror functionalities through voice, joysticks can be used to interact with the screen and many more.				

Paper ID: 248	**Title:** Smart Nursery Application Using Data Mining			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Ms Jyoti Mali	Prachi Agarwal	Mayur Chavan	Bhaumik Holam	Neha Singh
Abstract: In the world today, people cannot live without technologies such as televisions, mobile phones and computers. These technologies have slowly taken an essential part in people's day-to-day lives and being without them would be unimaginable for some of us. A lot of children going to playschool and nursery groups have a problem communicating with their parents and teachers about their schedule and daily activities. To solve this issue we are aiming to create an application where the teaching faculty and the concerned parents can communicate without any hesitation. It will also help the parents keep a track of their wards activity and daily actions. After conducting a few surveys with local families and nursery groups we came to a conclusion that the institute needs a platform where all the data could be summoned to be seen at any time of the day. This is only possible with the help of an application that allows you to be updated with your ward's progress at any instance.				

Paper ID: 249	**Title:** Engineering Education in New Era of Innovative Technology needs 360 degree competent Engineer to meet its goals			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Tanu Sharma	Akanksha Bhargava	Jyoti Gurav		
Abstract: Technical Education or Engineering Education is going under a drastic change in India. Systematical evolved learning system is required, which will inculcate qualifying requirements to be posed by an engineer and these will not be limited to factual knowledge, but also many other skills. It is still unclear which competences apart from factual knowledge is actually need, and how these competencies may be addressed or acquired using appropriate education system. The goal of Engineering Education is to have technical as well as non- technical competencies which will have a 360 degree impact on improvement of a student. This paper is an effort taken in direction to throw some light upon various issues related to the difficulties faced by students as well as technical education system in India to impart technical education.				

Paper ID: 250	**Title:** 3D printing using Holography			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Deepthi Sekhar	Supriya Dicholkar			
Abstract: 3D printing is a field of interest for Industry and there are a number of research going on to incorporate and utilize advanced technologies aiming toovercome the and to overcome the shortcomings existing techniques. Recently holography technique was used to improve the 3D printing technique by printing the object as a whole instead of layer by layer deposition. Volumetric 3D printing is yet another application of holography which prints 3D objects instead of 3D images of objects(Holograms). In this new process flashes laser-generated, hologram-like images onto photosensitive resin, printing a 3D shape all at the same time rather than layer by layer. Holography is capable of recording and reconstructing 3D information, this shaping of the light field can enable direct 3D fabrication in photopolymer resins. Here we report the review and analysis of Volumetric 3D printing and various types of photosentive resins which can be used for the technique.				

Paper ID: 251	**Title:** Survey of Network Routing protocols			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Ditixa Vyas				

Abstract: The purpose of routing protocols is to learn of available routes that exist on the enterprise network, build routing tables and make routing decisions. Some of the most common routing protocols include RIP, IGRP, EIGRP, OSPF, IS-IS and BGP. There are two primary routing protocol types although many different routing protocols defined with those two types. Link state and distance vector protocols comprise the primary types. Distance vector protocols advertise their routing table to all directly connected neighbors at regular frequent intervals using a lot of bandwidth and are slow to converge. Link state protocols advertise routing updates only when they occur which uses bandwidth more effectively. This paper describes various Routing protocols in brief and at the ebnd of the paper the protocols are compared with different factors

Paper ID: 252	**Title:** Androeye: For Visually Impaired People			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Manali Bhujbal	Amruta Hintya	Sagar Gothi	Saiprasad Patkar	

Abstract: Disability of visual text reading has a huge impact on the quality of life for visually disabled people. Visual impairment is now increasing rapidly, especially in these days when information is communicated a lot by text messages rather than voice. In this project, we developed an application that converts an image to text and then to speech. The basic framework of this system is that it captures an image, extracts only the region of interest (i.e. region of the image that contains text) and converts that text to speech, text and removes the background noise.

Paper ID: 253	**Title:** Automatic Evolution Of Optimum Number Of Clusters Using Clusterng Algorithm			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Nikesh Gupta	Husain Hasnain	Kunal Sivach	Bhavana Arora	

Abstract: Clustering is important technique in data mining. Data mining is a process of analyzing data from different perspectives and summarizing it to obtain useful information. It finds correlations or patterns among different data. The process of clustering involves partitioning of data into groups on the basis of similarities and differences between them. The result of clustering varies as the number of cluster parameter changes. Therefore known and must be determined before clustering. Several clustering algorithms have been proposed. Among them the k-means clustering is a simple and fast clustering technique. Here, the problem of selecting the number of clusters in a dataset using k-means approach is addressed. We can ask the end users to provide number of clusters in advance. But it may not always be feasible as the end user requires the domain knowledge of each data set. The initial cluster centres varies directly as the number of clusters. Thus, it is quite important fork-means to have good initial clusters.

Paper ID: 255	**Title:** Vertical Axis Wind Turbine (VAWT) With Solar Tracking System And Weather Station			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Devashree Hedau	Anita Maurya	Madhuri Avhad	Ajinkya Pawar	

Abstract: Wind energy is one in all the non-conventional types of energy and it's offered in humungous quantity. Vertical Axis turbine (VAWT) will generate electricity. This comes aims of utilizing this wind energy in simplest manner to urge the most electrical output, and thus we tend to selected highways and railways as our installation web site wherever we are able to take the advantage of the moving vehicles and trains on each the perimeters of the road and platform severally. This model also will be increased with star following panel at the highest of it that assist in generating a lot of energy along or within the absence of different. Within the name of advancement we are going to even be exploitation this model as a lookout with the assistance of various sensors such temperature, humidness etc. This all can keep company with the options of real time knowledge work and IOT. This project are going to be price effective and economical in terms of output. In order that the govt. will excogitate this project and may implement this kind of vertical axis turbine on highways and railways at economical price.

Paper ID: 256	**Title:** A study of applications of Differential Equations to array of fields			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Kamaljit Kaur Bhagwat	Ancy Dsouza	Poonam Deshpande	Akanksha Desai	Monika Shah
Abstract: Differential equations have a wide application in the field of electrical engineering, mechanical engineering, business, Biotechnology ,medical field ,economics, automobile, computer science etc. Differential equations are categorized as ordinary differential equations and partial differential equations. The distinction being that ODEs involve unknown functions of one independent variable while PDEs involve unknown functions of more than one independent variable.(1).In this paper we are going to focus on those type of differential equations used in various fields..				

Paper ID: 257	**Title:** Smart Railway Track Monitoring System			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Vaishnavi Borade	Prajakta Pawar	Sushanth Poojary	Shrutanki Kamble	Sushma Patil
Abstract: The project aims in designing railway track crack detection system with Microcontroller, IR obstacle Sensors, which detects the cracks along its path, it is also capable of monitoring the location of the crack by using the GPS module and alerts through SMS using GSM module. PIC Microcontroller is a central component of the system. When any crack or deformation is detected on the track by the IR SENSOR then with the help of GSM AND GPS MODLUE it will inform to the, to railway authorities and to loco pilot of train running in that particular range, and the train will be stopped automatically. The railway authorities will be provided with a SMS about the detection of problem in track with the longitude and altitude of the location. Also to detect fire, Fire Sensors are being used with help of which authorities can be informed in case of fire.				

Paper ID: 258	**Title:** Analysis of PLL circuit for Single Event Transient			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Mahalaxmi Palinje				
Abstract: Space exploration provides us with valuable information about the universe. Progress in this held is based upon understanding and solving number of issues. Radiation experienced by aircraft in the outer space is one of them, where the sun is the main source of radiation. Electronic components on board the aircrafts/spacecraft are exposed to these radiations which can cause reduction in the lifetime of a craft and even mission failure. Phase-locked loops (PLLs) are an integral part of many electronic systems. They are used for a number of applications such as local oscillator (LO) in wireless communication systems, clock recovery circuitry at the serial or parallel high speed data links, synchronizing data transmission and as a frequency synthesizer in digital systems. This report summarizes effects of radiation which is introduced in a phase locked loop circuit in the form of a current pulse.				

Paper ID: 259	Title: 5g Radio Head- next Generation Technology			
Author1:	**Author2:**	**Author3:**	Author4:	**Author5:**
Gauri Salunkhe	Akansha Bhargava	Jyoti Dange	Jyoti Kolap	Tanu Sharma

Abstract: In the near prospect, beyond 4G has the major objectives or difficulty that need to be addressed are improved capacity, better data rate, decreased latency, and enhanced quality of service. To meet these demands, radical improvements need to be made in cellular network architecture. This paper presents the consequences of a detailed study on the fifth generation (5G) cellular network structural design, challenges and some of the solution for promising technologies that are supportive in improving the structural design and gathering the demands of users. In this comprehensive review focuses 5G cellular network architecture, huge various input many output technologies, and device-to-device communication (D2D). Next, to with this, some of the promising technologies that are addressed in this paper include intrusion supervision, variety sharing with cognitive radio, ultra-dense networks, multi-radio access technology organization, full duplex radios, and millimeter wave solutions for 5G cellular networks. In this paper, a universal possible 5G cellular set of connections architecture is proposed, which shows that D2D, small cell access points, network cloud, and the Internet of Things can be a part of 5G cellular network architecture. A comprehensive study is integrated concerning present research projects being conducted in different countries by research groups and institutions that are working on 5G technologies. Finally, this paper describes cloud technologies for 5G radio access networks and software defined networks.

Paper ID: 260	**Title:** Analysis of Variations in Data Recognition Rate using Neural Logic Min-Max Algorithm			
Author1:	**Author2:**	**Author3:**	**Author4:**	**Author5:**
Mamta Meena	Nikita Patil	Sarang Kulkarni		

Abstract: fuzzy min max (190), handwritten signature (175), max neural network (142), neural network (136), handwritten signature image (110), automatic person identification system (100), signature recognition (95), signature image (95), moment invariant (80), line signature verification (79), min max (75), handwritten signature recognition (63), fuzzy min max classifier (60), signature verification (60), hus moment (50), converting input image (47), handwritten signature database (47), signature verification system (47), signature recognition system (47), signature based automatic person (40), standard binary image type (40), cropped handwritten signature image (40), max neural network classifier (40)

Paper ID: 261	Title: Performance of Turbo Product Code Decoding in Wireless Communication			
Author1:	Author2:	Author3:	Author4:	Author5:
Amruta Pokhare	Sachin Gavhane	Trushita Chaware	Sanchit Chavan	

Abstract: In this paper, the effect of TPC decoding using Chase-II algorithm with reduced number of test patterns (TPs) is evaluated using the AWGN channel in orthogonal frequency division multiplexing (OFDM) mode. The TPC is constructed with multi-error-correcting extended Bose-Chaudhuri-Hocquengem (eBCH) codes. TPs are classified into different conditions based on the relationship between syndromes and the number of errors so that TPs with the same codeword are not decoded except the one with the least number of errors. The parameters considered are bit error rate (BER), Eb/N0, data rate and code rate. The research contribution shows that the percent of TPs need to be decoded for eBCH(128, 113, 2) when p = 2 for 1st iteration it is between 22% - 16% and from 5th iteration onwards it is between 14% - 12% for SNR = 1.5dB, 1.8dB, 2.0dB, 2.2dB, 2.4dB and 2.5dB in 802.16 system, respectively. This research contribution helps to make the 802.16 systems simpler, reduces the decoding time, complexity and improves the performance.