MAHAVIR EDUCATION TRUST'S

SHAH & ANCHOR KUTCHHI ENGINEERING COLLEGE

CHEMBUR, MUMBAI-88.

PERCEPTRON

COMPUTER ENGINEERING DEPARTMENT

2015-2016

Vision

To develop computer engineering graduates with engineering and managerial skills to acquire high end positions that are globally recognized.

Mission

To impart computer engineering knowledge and to provide exposure to latest technologies so that, students can solve various engineering problems of different applications and possess social, ethical responsibilities and have attitude of lifelong learning so as to accomplish good employment opportunities.

Program Educational Objectives

- To impart knowledge of fundamentals of all the courses of computer engineering so that, the students are able to analyze, design, implement and test various engineering problems from different application domains.

- To provide exposure to latest technologies and adequate training to work as a team to inculcate among the students social responsibilities and respect towards society by creating societal environment.

- To promote student awareness on the lifelong training and introduce them to professional ethics and code of professional practices.

FROM HOD's DESK

Dear Readers,

I am very happy to see this edition of our department's newsletter **PERCEPTRON**. It has given a platform for the information exchange among students and the staff as well. The Department has made lot of efforts to provide students with excellent teaching facilities and to create a constant learning environment for both staff and students.

This newsletter gives a gist of different events, seminars, workshops, training programs organized by our Department. Many of these events are organised in association with different student chapters of the professional bodies like CSI, IEEE, ISTE. This enhances the soft skills and professional attitude among the students, which is required in the industry. Newsletter also gives information related to achievements of our students, their performance and the overall development of them in co-curricular and extracurricular activities.

We have organized many awareness programs like Higher Education & Career Guidance, Literature Survey, Gate Awareness, Forensic awareness to name a few. The department has organised faculty development programs to enhance skills of the faculties and also conducted programs like syllabus settings, subject orientations on behalf of University of Mumbai.
 I hope these initiatives will encourage students from all disciplines to participate in the events and take opportunity provided by the Computer Engineering Department to develop their skills and excel in their life and career. I sincerely thank the Management and the Principal of SAKEC for their constant support, encouragement and guidance to bring out this issue of PERCEPTRON.

CONTENTS

CLOUD COMPUTING AND BIG DATA ANALYSIS

Computer Engineering Department of Shah and Anchor Kutchhi Engineering College, Mumbai organized two weeks STTP on "Cloud Computing Technologies and Big data Analytics" from 1st December 2015 to 11th December 2015. The STTP was attended by the staff members of department as well as faculties and students of other colleges.

Dr. Surya Durbha (CSRE, IIT) was the Keynote speaker on the First day. Many resource person from esteemed organizations and colleges had conducted lectures and hands-on sessions on Big Data and Cloud Computing Technologies like IaaS and SaaS implementation using Openstack, Cloud Security, Cloud installation , Big Data introduction and Hadoop Eco system, Data min-ing with Big Data etc. The contents of the STTP helped attendees to have some insights of newly introduced subjects in syllabus of Mumbai University of final semester in Computer Engineering and Information Technology branch. The program was organised by Prof Dhara Kalola and Prof. Jaya Fulekar.

Speakers and their topics were as-follows:

- *Mr. Yati Gharat,* Corporate Trainer presented IaaS and SaaS implementation using Open stack Identity & User Management in Cloud

- *Mr. Bhushan Jadhav,* TSEC, gave us valuable insight on NoSQL Basics and Hands-on MONGO DB

- *Mr. Parth Vashi* taught hands on session on Big Data and mining on Big Data

- *Dr. M. Vijayalakshmi*, VESIT, presented Clustering and Link Analysis on Frequent Item Set

- *Mr. Jayanthi Gokhale* took Map-Reduce Programming and Hadoop Cloud basics & Virtualization

- *Ms. Amita Dhainje*, Capgemini, Pune, gave insights on Big Data Basics, Hadoop Ecosystem, Map-Reduce

- *Ms. Vaishali Tupe*, SAKEC, took hands-on session of configuring and deploying private cloud

- Dr. Deven Shah presented Cloud Security

- *Dr. S. K. Shinde*, LTCE, concluded the sttp with Mining Data Streams, Practice Session, Valedictory Session.

"I don't need a hard disk in my computer if I can get to the server faster... carrying around these non-connected computers is byzantine by comparison."

– Steve Jobs,

LINUX WORKSHOP

IEEE with the Computer Department of SAKEC provided the students a chance to learn one of the prominently used open source software "Linux" on 5th September, 2015.

Out of all the distributions available, *Ubuntu* Linux was used for the event, and was worked on the hypervisor name VMware where Linux was Dual-booted over Windows.

Linux introduces a graphical installer named Anaconda, intended to be easy to use for novices and which has since been adopted by some other Linux distributions.

The event was divided into two sessions. The first session was taken by *Mrs. Vaishali Hirlekar*, she started with the introduction to open source, its features, various Linux distributions and Linux file system.

The second session was conducted by *Mr. Atul Kachare*, who highlighted on basic linux commands like creation and deletion of directories, file handling, file permissions and ownership, etc. He demonstrated the use of various tools to conclude the session.

ORACLE WORKSHOP

Some computer enthusiasts somewhere between the flecks of chalk powder dancing rhythmically in the sun's rays inside the classrooms were interested to think hard, scrabble their mind & fit into the empty shells of dauntlessness, dexterity & dogma to aim for extremely mind bending workshop known as *'ORACLE'*. They were ready to unleash the technical fundamental knowledge and the talent within themselves in an interactive environment.

A huge crowd of thrilled enthusiasts registered themselves for the Workshop. They were ready to explore and visualize ideas and collaborate across disciplines. It is said in a famous proverb, "When the student is ready, a teacher arrives.*"* *Prof. Uday Bhave* was the featured speaker. This was just a clip of the movie for the event that was organized by IEEE-SAKEC in association with Computer Engineering Department at Lab No: 507, 508 & 509 on 20th February, 2016.

Computer science is no more about computers than astronomy is about telescopes.

Edsger Dijkstra

JAVA DATABASE CONNECTIVITY

A workshop on *"Java Database Connectivity"* was conducted on 20th February, 2016 at Lab No. 613 and 614. The lecture was conducted for students of all branches by CSI SAKEC and Computer Engineering Department for three hours by *Prof. Deepshikha Chaturvedi.*

In this session, concepts of MySQl, Backend ORACLE, JDBC drivers, was taught. The complete concept was explained using Banking application. She explained various database queries related to creation, insertion, selection and updation of data in database.

The students were shown how to perform different banking functions using front end and the same was reflected in database.

The aim of this program was to learn java database connectivity so that the students are made comfortable while doing their projects or any application.
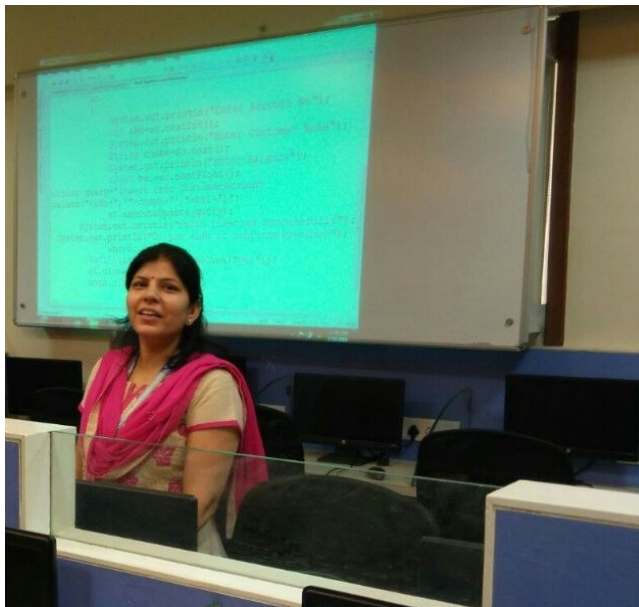
I think it's fair to say that personal computers have become the most empowering tool we've ever created. They're tools of communication, they're tools of creativity, and they can be shaped by their user.

Bill Gates

ORIENTATION PROGRAM ON MACHINE LEARNING

With the view of changed syllabus having the subject of Machine Learning in BE - Computer Engineering by University of Mumbai, an Orientation Program was arranged by Computer Engineering Department of Shah and Anchor Kutchhi Engineering College on behalf of University of Mumbai on 5th January, 2016. This program aimed at discussion of the syllabus, books and experiments, modelling structure of question papers and marking scheme. It was co-ordinated by *Dr. Jyoti Joglekar*. The members of syllabus setting committee were *Dr D.R. Kalbande (SPIT), Prof. Anuradha S. (SFIT) and Prof. Pinki Vishwakarma* (SAKEC), also presented the topics of discussion.

ORIENTATION PROGRAM ON DIGITAL FORENSICS

A new subject of Digital Forensicswas introduced in the revised syllabus of BE Computer Engineering by University of Mumbai. An Orientation Program was arranged by Computer Engineering Department of Shah and Anchor Kutchhi Engineering College on behalf of University of Mumbai on 5th January, 2016. The aim of the program was to understand the subject syllabus, books, experiments and question paper model with marking scheme. The subject experts, *Dr. D.R. Kalbande (SPIT) and Mrs. Nilakshi Jain (SAKEC)*, presented the topics of discussion.

ME SYLLABUS REVISION MEETING

University of Mumbai changes the syllabus of Engineering approximately every 4 years to remain updated with new topics coming up in technology world.

Syllabus setting of Master of Engineering for Computer Engineering Course was organised by Computer Engineering Department The Chairman, Board of Studies Computer Engineering , *Dr. Subhash Shinde* was the Chief Guest and presenter of the syllabus.The event was co-ordinated by *Dr. Jyoti Joglekar.*

Updated subjects were presented by associated committee members as Data Storage and Retrieval by *Prof. Vidyullata Devmane.* Internet of Things by *Dr. Jyoti Joglekar*, Algorithm and Complexity by *Dr. Archana. B. Pathankar*, Advance Computer Network by *Dr. Madhumita Chaterjee,* Computational Intelligence by *Dr.T.K.Sarode*, Logic & Automated Reasoning by *Dr. Prauin Nikumbh*, Image Analysis & Interpretation by *Dr. Archana. V. Pathankar*, Natural Language Processing by *Prof. Sharvari Gouilkar.* Advance Operating Systems by *Dr.Leela Raga*, ICT for Social Cause and User Experience Design, Advance Soft Computing by *Dr. Dhananjay Kalbande.* High Performance Computing by *Dr. Sangita Chaudhari,* Data Science by *Dr. Amiya. K. Tripathy.* Ethical Hacking and Digital Forensics by *Dr. Nilakshi Jain*, Semantic Web by *Prof. Sujata Khedkar.*

ME DATA STORAGE AND RETRIEVAL SYLLABUS MEETING

ME Computer Engineering subject of Data Storage and Retrieval Syllabus Meeting was held at Shah And Anchor Kutchhi Engineering College on 17th June, 2016. The event was co-ordinated by *Prof. Vidyullata Devmane* and Prof. Shahzia Sayyad. The attendees for the event were *Prof. Madhu M.N, Prof. Nilima Dongre, Prof. Arti Deshpande, Prof. Gresha Bhatia*. The aim of the meet was to design the subject syllabus, books, experiments and question paper model with marking scheme.

This revolution, the information revoultion, is a revolution of free energy as well, but of another kind: free intellectual energy. It's very crude today, yet our Macintosh computer takes less power than a 100-watt bulb to run it and it can save you hours a day. What will it be able to do ten or 20 years from now, or 50 years from now?

Steve Jobs

WEBINAR ON NETWORK SIMULATION

NetSim is a leading network simulation software for protocol modelling and simulation, network R & D and defence applications. Dellsoft had organized a webinar on Wednesday, 10th February, 2016. Staff members from Computer Engineering Department had attended this session at Lab No. 702.

Dr. Jyoti Joglekar had co-ordinated this session. They had given demonstration on generation of traffic, packet tracing, changing dynamic metrics, generation of simulation report of user generated libraries covering packets and events for detailed analysis. Also they have informed that the new version has been provided with protocol libraries in source C code form with necessary API's and documentation so that user can also generate libraries by modifying protocol source C code.

WEBINAR ON BUILDING CYBER RESILENCE USING SIMULATION

Computer Engineering Department has joined webinar on above mentioned topic on 6th April, 2016 which was being held by Continuity and Resilience (CORE). The webinar was attended by the staff members of department.

The webinar started with an introduction of speaker *Mr. Saurabh Agarwal.*

This session showcased how working with unreliable information can dramatically harm business. People are the most important reason why security fails. It is about attitude, behavior, communication, interaction as well as procedures and processes. This session helped the staff members to understand various cyber risk associated with a business and prevention measures of the same.

EMBEDDED SYSTEM

The Faculty Development program was conducted by the speaker Prof. Vidya Gogate on 5th March 2016. The FDP was on the topic of *Embedded System Design*. The session started with introduction to Embedded System, Characteristics of Embedded Systems and then about the application- Digital Camera. Other topics covered were Controlled Area Network, RS485 and Modbus Protocol, Introduction to ARM and RTOS: Real Time Operating System.

WORKSHOP ON J2ME

This workshop examines in detail the Java 2 Platform, Micro Edition (J2ME) and targets the intermediate developer who has a solid background in Java programming and the concepts of object-oriented design and development. The workshop was conducted by Prof. Pinki Vishwakarma which covered general architecture and devices of J2ME. As part of the architecture discussion, it provides an overview about profiles and configurations and considerations for packaging and deploying J2ME applications.

Thus, the workshop which was conducted by Computer Engineering department at an institute level was a definite platform to learn all the basics & core methods of J2ME.

BEST FINAL YEAR PROJECTS

Department had organized the Best Project Presentation event for the current final year students on 5th August, 2015. Students presented their details about the project to their juniors which was beneficial for the students to develop their project and improve their presentation skills. Best Project students were appreciated by awarding them with the certificates.

Sr. No,	Student Name	Project Name	Guide Name
1	Komal Dedhia, Urvi Gala,Tarjani Shah	Real Time Ticketing for Local Trains	Dr. Vinit Kotak
2	Saravanan SJ, Mayuri Singh, Nehal Kamat	Performance Analysis of Color feature based image classification algorithm on standard datasets	Prof.Rekha Ramesh
3	Ninad Bhat, Advait Kamat, Abhishek Shambhu	Decision Support System for Medical Diagnosis	Dr. Jyoti Joglekar
4	Aditya Venkateshwaran, Aditya Thati, Dhaval Vora	Privacy Preserving of data in Cloud Storage	Prof. Vidyullata Devmane
5	Saumya Lahera, Dwij Bhatt, Jigar Patel	iEditor	Prof. Shahzia Sayyad
6	Namrata Maun, Aishwarya Iyer,	Secure Stego-Image Communication Protocol using RSA	Prof. Manoj Dhande
7	Vinit Doshi, Kewal Haria, Mandar Kanitkar.	Position Based Stegno and Cryptographic Secure Data Trans-Receiver	Prof. Sarika Purao

8	Sarang Kulkarni, Rashendra Talgaonkar, Sumukh Khond	Voice Recognition based Wireless Home Automation System	Prof.Uday Bhave
9	Pranav Shetty, Chetana Banushali, Chintan Tanna	Image Encryption Algorithm for secure transmission of the Image	Prof. Manimala Mahato
10	Himanshu Chhabra, Riddhi Thacker, Dhiraj Thakur	Stenography using Adjacent Pixel Difference Technique with AES	Prof. Rupali Kale

LITERATURE SURVEY SESSIONS

As per Mumbai University guidelines it is required to do maximum in-house projects which are research based. So to give basic understanding of literature review, *Dr. Jyoti Joglekar* presented talk to T.E. Computer students (TE3). Most of the faculties also attended the same. Various points that were covered were: Importance of B.E. project and publishing a paper, how to read a paper using three pass, importance of citation, references Plagiarism, Impact factor, Different phases of writing and reviewing a paper and exhibition of top 10 projects. Along with, the areas in which students can develop their projects were discussed.


A computer would deserve to be called intelligent if it could deceive a human into believing that it was human.

Alan Turing

Spoken Tutorials are Software training courses offered by the Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt., of India, as distance learning method. This is an audio-video tool, which is used to teach Open Source Software. Computer Engineering Department at Shah and Anchor Kutchhi Engineering College has conducted courses like Advanced C test, JAVA and Python for First, Second and Third year students respectively. Total of 568 students have appeared for this test courses. An online test is later conducted at the end of the program and students are be given the certificates by IIT Bombay. The session was Coordinated by Prof. Sonali Bhutad.
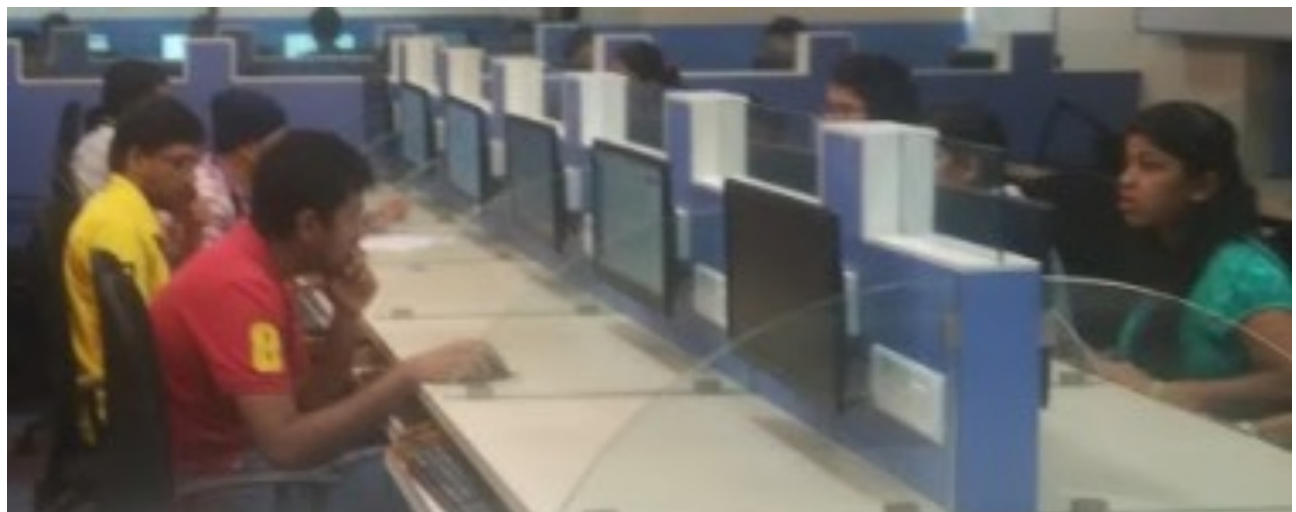
FORENSIC AWARENESS WEEK

Final Year students of 'D' division of Computer Engineering Department, Shah and Anchor Kutchhi Engineering College took an active part in the celebration of Forensic Awareness Week organized by the Directorate of Forensic Science Laboratories, Home Department of State Maharashtra which had been celebrated from 27th to 30th January, 2016. The students witnessed the procedures and practices followed in forensic science on 30 January from 1:00 PM to 5:00 PM. Staff members *Mrs. Sonali Bhutad*, *Mr. Shahshikant Radke, Mrs. Vaishali Hirlekar* accompanied the students for this event.At the end of the visit we had an informative discussion with an expert from Cyber Forensics Department on the challenging aspects of forensic investigation, skills needed by a computer forensics, knowledge needed by computer forensic investigator, and phases of computer forensic investigation.

BEYOND SYLLABUS LECTURE

Beyond syllabus lecture "Attacks on multitier web applications" was conducted on 2nd March, 2016 and the venue was class room 77. The lecture was conducted for B.E. students for two hours by *Prof. Pallavi Deshmane.* In this lecture topics covered were Multitier architecture, types of attacks and mitigation of attacks.

GATE AWARENESS LECTURE

GATE (Graduate Aptitude Test for Engineering) is entrance exam conducted for admissions or registrations of higher studies in engineering like M.E. (Master of Engineering), M.Tech. (Master of Technology), Ph.D. (in Engineering or Technology) etc., in India. This program was planned for third year computer engineering students, so that they can decide and prepare for gate when they will be in the final year (BE). There were three sessions conducted for TE3,TE4,TED on 29th February, 4th March and 3rd March 2016 respectively by Prof. Shashikant Radke.

HIGHER EDUCATION AND CAREER GUIDANCE

Mr. Sumeet Bhatia was invited on 12th February, 2016 to deliver a lecture on Higher Education and Career Guidance . He has completed his graduation in 2009, after serving in TCS for four years he completed his M.S. from North Carolina University, US and is currently working in Amazon. He explained various points to the T.E. Computer students about writing Statement of Purpose (SOP), Letter of Recommendations (LOR), Selection of University, Subjects for post graduate studies, paper presenta-

NBA CRITERIA DISSEMINATION

One Day workshop entitled "NBA Self Assessment Report Criteria" was organized on 7th March, 2015 in the third floor auditorium. The program was coordinated by Program Coordinators of all departments. For department of Computer Engineering, the coordination was done by Dr. Jyoti Joglekar. *Prof. Manimala Mahato* and *Prof. Bhakti Sonawane* presented criteria B4. *Prof. Shashikant Radke and Prof. Manoj Dhande* presented criteria B7.

To err is human, but to really foul things up you need a computer.

Paul R. Ehrlich

INTERNATIONAL YOGA DAY

     "International Day of Yoga" was celebrated in the institute, on 21st June 2016. *Prof. Shashikant Radke* and *Prof. Shridhar Sahu* discussed the importance of Yoga in day to day life and helped all faculties to learn few yoga postures named Yogmudrasan, Vajrasan, Padmasan.

STAFF OUTING AND TREE PLANTATION PROGRAM

The Computer Engineering Department of Shah and Anchor Kutchhi Engineering College hasd organized a staff outing on 11th October 2015. Early Morning many staff members accompanied with their family members had reached Neral. A short breakfast, games, lunch etc was arranged. During the outing Tree Plantation was also held at Neral.
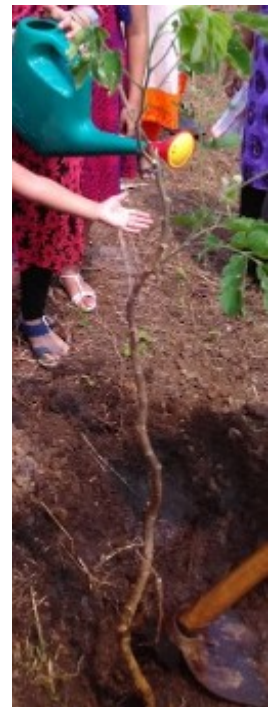
STAFF APPRECIATION

Many faculties go ahead with technical and educational upgrades. This effort of upgrading, with many responsibilities is challenging task for many. So the department had arranged Staff Appreciation Event on 7th April 2015. The chief guests for the event *were Dr. Bhavesh Patel,* Director, Shah and Anchor Kutchhi Engineering College and *Prof. A. W. Khan,* Register, Shah and Anchor Kutchhi Engineering College. They appreciated the efforts of staff by presenting appreciation certificates.

ACHIVEMENTS BY FACULTY

Sr. No.	Faculty Name	Topics	Location	Date	Remark
1	Dr. Jyoti Joglekar	International Conference Equinox 2015	Terna Engineering College Department of E&TC	30/09/2015- 01/10/2015	Invited as a Session Chair.
2	Dr. Jyoti Joglekar	Annual Progress Seminar	Rajiv Gandhi Institute of Technology	04/09/2015	Invited as a Chairperson of APS exam panel of PhD Student.
3	Dr. Jyoti Joglekar	Orientation program on Digital Signal Processing & Image Processing	Sardar Patel Institute of Technology College.	17/07/2015	Invited as Guest
4	Dr. Jyoti Joglekar	Special Lecture on "Relaxation Labeling based Image Matching for students of CSRE at IIT Bombay"	Centre of Studies in Resources Engineering	11/03/2016	Special Lecture taken
5	Dr. Jyoti Joglekar	Improving matching ability of descriptors on multi-sensor Image with complementary Information.	EEE Transaction Paper	12/07/2015	Reviewer of IEEE Transaction

Sr. No.	Faculty Name	Topics	Location	Date	Remark
6	Prof. Vidyallata Devmane	Encouraging project group to participation in "2nd National Level Project Exhibition Cum Poster Presentation" 2016	Universal College of Engineering	11/03/2016	Encouraging project group
7	Prof. Pinki Vishwakarma	Participation in orientation program on "Machine Learning" at SAKEC	Shah and Anchor Kutchhi Engineering	05/01/2016	Coordinator
8	Prof. Dhara Kalola	Conducted ISTE Approved two week STTP on Cloud Computing Technologies and Big Data Analytics	Shah and Anchor Kutchhi Engineering	1st to 11th December, 2015.	Organizer
9	Prof. Jaya Fulekar	Conducted ISTE Approved two week STTP on Cloud Computing Technologies and Big Data Analytics from 1st to 11th December, 2015.	Shah and Anchor Kutchhi Engineering	1st to 11th December, 2015.	Organizer
10	Prof. Sarika Rane	Encouraging project group to participation in "2nd National Level Project Exhibition Cum Poster Presentation" 2016	Universal College of Engineering	11/03/2016	Encouraged to Project Group for Participation

ACHIEVEMENTS OF STUDENTS

Sr. No.	Name of the student	Project Name	Project Details	Company/ Freelanc-ing
1	Akash A. P. Indresh Jotangia	www.e-gyaan.in	Innovative learning and school manage-ment product which is all device ready that bring s digital technology in the traditional education system by present-ing easy to implement complete solu-tion, built on open source technology, delivered as a service that can be di-rectly access through your web	Freelanc-ing
2	Mayuri Karnik	Girl Dres-sup games (Angie Dressup)	Localization and documentation of the various dressup games developed by the company. The dressup apps included Angie Dressup, etc	Internet Design Zone, Borivali
3	Sanjana J Thorat	4G JIO(Jio chat)	4G jio Related application and network testing .The app like jio chat and 4G jio network based app development.	Reliance corporate park, Ghan-soli.
4	Kajal Sharma Nirav Doshi Jigita Shah	LINKSMART ONGO	Web Services 1.Websitesforms 2.RDLC Report 3.Testing on ONGO application	AGS Trans-act Tech-nologies Ltd
5	Salil Deshpande	CodeStar	https://play.google.com/store/apps/details?id=in.net.codestar.codestar An app made for students to view/study codes for subjects like SPA, OOPM, DS, etc.	Freelanc-ing

Sr. No.	Name of Faculty	Title	Date	Journal/Conference details
1	Dr. Jyoti Joglekar	Remote Data Integrity Achieving Schemes in cloud Storage: A Survey	10th March to 11th March 2016	ICDECT-2016-ASIC Series Springer
2	Dr. Jyoti Joglekar	Comparison of Algorithms for Detecting Firewall Policy Anomalies	22nd Nov 2015	ICEECMPE- Hyderabad
3	Prof. Vidyullata Devmane	Remote Data Integrity Achieving Schemes in cloud Storage: A Survey	10th March to 11th March 2016	ICDECT-2016-ASIC Series Springer
4	Prof. Vidyullata Devmane	"A Survey on Secure De-duplication of Data in Cloud Storage	Aug.-2015	IJIET-2016 ijiet.com/
5	Prof. Vidyullata Devmane	Public Auditability of data Checking integrity in Cloud Storage	Oct-2015	IJIET-2016 ijiet.com/
6	Prof. Vidyullata Devmane	Secret Sharing Approach in Multi-database System	April-2016	IJCT ISSN 2277-3061 V.15.6 cirworld.com
7	Prof. Pinki Vishwakarma	A Survey On Feature Selection Methods for High Dimensional Data	Jan 2016	International Conference on Recent Trends in Computer & Electronics Engg. (ICRTCEE)

Sr. No.	Name of Faculty	Title	Date	Journal/Conference details
8	Prof. Pinki Vish-wakarma	A survey on-Data Dis-semination Methods and protocols	Jan 2016	International Conference on Recent Trends in Computer & Electronics Engg.(ICRTCEE) PRAGYANAM'16
9	Prof. Shahzia Sayyad	Comparison of H.264 and H.265/HEVC Video Compression Standards – A Survey	Feb 2016	7th International Conference on Commu-nication, Computing and Virtualization 2016 -sciencedirect
10	Prof. Shahzia Sayyad	Implementation of Web Defacement Detection Technique	Oct 2015	International Journal of Innovations in Engineering and Technology (IJIET), Volume 6 Issue 1: 134-140-ijiet.com/
11	Prof. Shahzia Sayyad	Data Sharing Account-ability in Cloud Comput-ing	Oct 2015	International Journal of Innovations in Engineering and Technology (IJIET), Volume 6 Issue 1: 134-140-ijiet.com/
12	Prof. Shahzia Sayyad	Tiny TCP/IP Protocol Suite for Embedded Sys-tems with 32 Bit Micro-controller	Oct-Nov 2015	Indian Journal of Computer Science and Engineering 1.6: 158-165.
13	Prof. Sonali Bhutad	Detecting and Prevent-ing Intrusions in Mul-titier Web Applications	1st Oct. 2015	IJIET-ijiet.com/

Sr. No.	Name of Faculty	Title	Date	Journal/Conference details
14	Prof. Bhakti Sonawane	Gost, Hog and Dwt based Content Based Image Retrieval for facial Image	March 2016	ICDECT-2016
15	Prof. Bhakti Sonawane	Mouse Control using Color Bands	April2016	IJSRD Volume 4Issue2,2016
16	Prof. Bhakti Sonawane	Unsupervised Approach for Change Map Generation	April2016	Communication and signal processing IEEE Conference
17	Prof. Shilpa kalantri	Comparison of Algorithms for Detecting Firewall Policy Anomalies	22nd Nov 2015	ICEECMPE- Hyderabad
18	Prof. Pallavi Deshmane	Detecting and Preventing Intrusions in Multitier Web Applications	1st Oct. 2015	IJIET -ijiet.com/
19	Prof. Amol Dhumal	Confidentiality – Conserving Multi-Keyword Ranked Search above Encrypted Cloud Data	Feb 2016	ICCCV-2016-Thakur College of Engg. & Technology
20	Prof. Vaishali Hirlekar	Secret Sharing Approach in Multi-database System	April-2016	IJCT ISSN 2277-3061 V.15.6 -cirworld.com

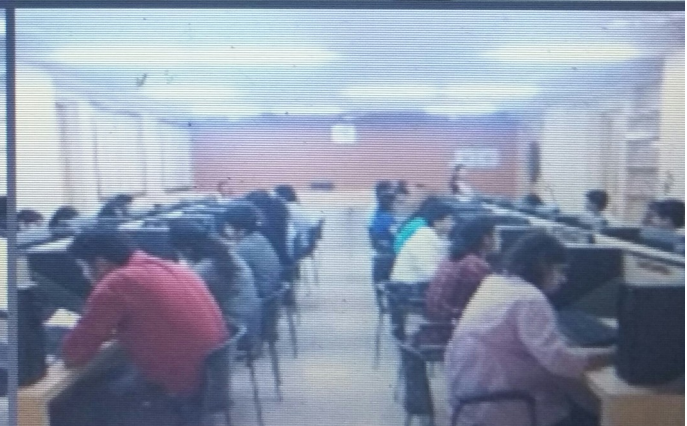| Sr. no	Name of Student	Paper title	Journal/conference	Volume/event date
1	Pooja Jaiswal, Saloni Barvalia, Smit Shah, Krishma Shah	Secure Image Transmission using Visual Steganography	International Journal on Recent and Innovation Trends in Computing and Communication	April 16 Volume 4 Issue 4 , (IJRITCC), ISSN: 2321-8169, PP: 145 – 147
2	Akshaya Sawant, Nidhi Pandey, Pooja Sahu,	Secure Data Communication using AES Algorithm, Palindrome Number & Color Code	International Journal on Recent and Innovation Trends in Computing and Communication	April 16 Volume 4 Issue 4 , (IJRITCC), ISSN: 2321-8169, PP: 136 - 138
3	Aishwarya Kotyankar, Nidhi Mannadiar, Prajkta Jagtap	Watermarking for Security in Database	International Journal on Recent and Innovation Trends in Computing and Communication	April 16 Volume 4 Issue 4 , (IJRITCC), ISSN: 2321-8169, PP: 578 - 583
4	Misbah Khan	ZIGBEE technology	NTPP, RAIT, under Technical Symposium	1-3 Oct,2015

WORKSHOPS ATTENDED BY FACULTY

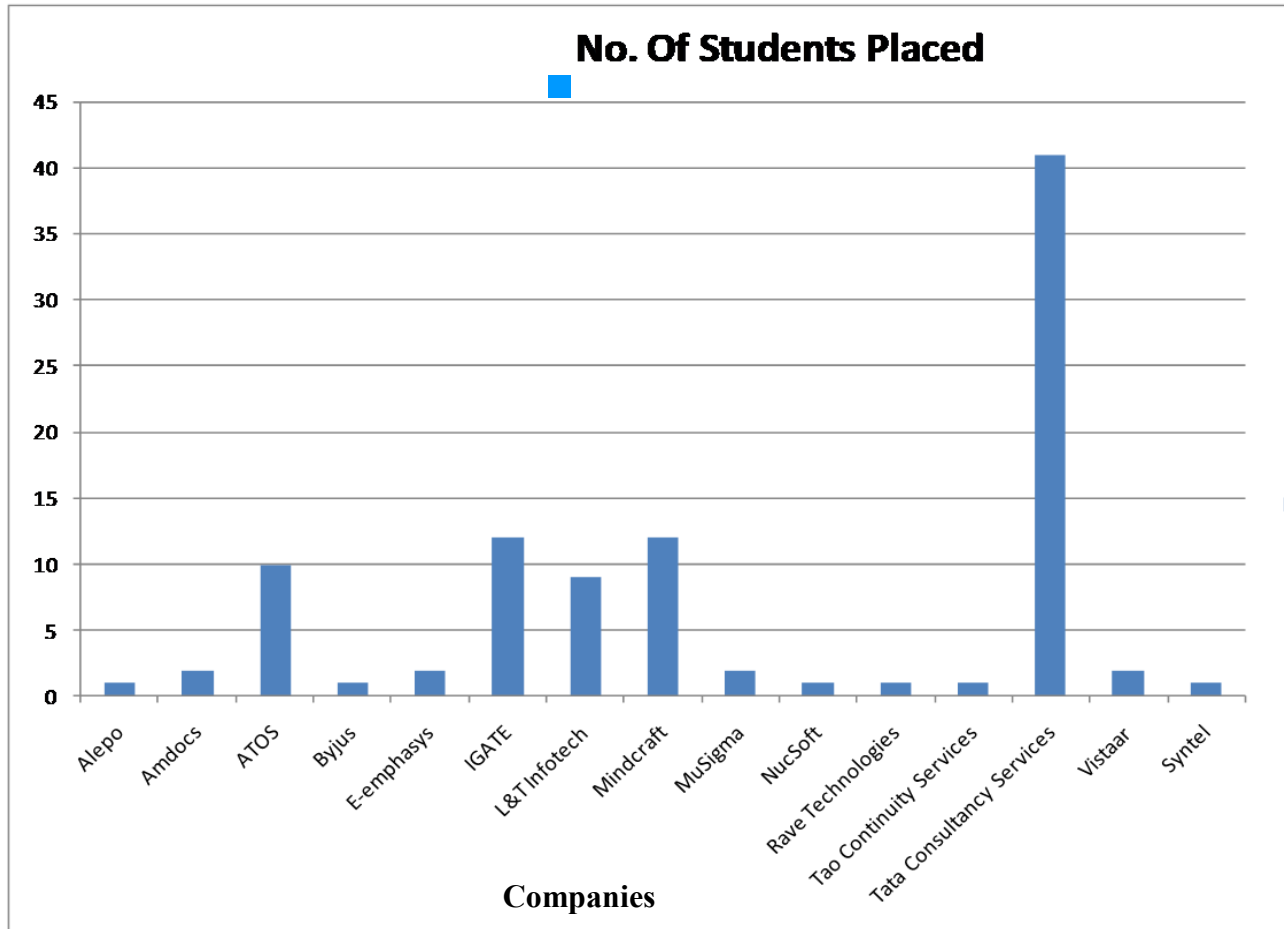| Sr no.	Name of the Faculty	Workshop/ Seminar/ Programs attended outside	Date	Time	Venue
1	Prof. Pallavi Deshmane	Orientation on Data Warehousing and Mining	08/01/2016	10am - 5pm	LTCE,Khoparkhairne
2	Prof. M. S. Khairnar	Orientation of Airtificial Intelligence	May 2015	11am to 1pm	Terna Engineering College, Navi Mumbai.
3	Prof. Bhakti Sonawane	Distributed and Embedded High Performance Computing	01/06/2016 to 04/06/2016	10:00am to 5:00pm	VMCC,IITB
4	Prof. Pinki Vishwakarma	Two-week ISTE STTP on Introduction to Design of Algo-	25/5/15 to 30/5/15	9 amto 5pm	KJSCE,Vidyavihar
5	Prof. Pinki Vishwakarma	Orientation on Data Warehousing and Mining	08/01/2016	10am - 5pm	LTCE,Khoparkhairne
6	Prof. Vaishali Hirlekar	FDP on "Digital Forensics : Open Source Tools"	29/01/16 To 30/01/16	10am - 5pm	FRCRCE, Bandra

"You don't have to worry about being a number one, number two, or number three. Numbers don't have anything to do with placement. Numbers only have something to do with repetition."

-Ornette Coleman

IN-CAMPUS PLACED

No. Of Students Placed

Companies: Alepo, Amdocs, ATOS, Byjus, E-emphasys, IGATE, L&T Infotech, Mindcraft, MuSigma, NucSoft, Rave Technologies, Tao Continuity Services, Tata Consultancy Services, Vistaar, Syntel

Values shown (approximate): Alepo 1, Amdocs 2, ATOS 10, Byjus 1, E-emphasys 2, IGATE 12, L&T Infotech 9, Mindcraft 12, MuSigma 2, NucSoft 1, Rave Technologies 1, Tao Continuity Services 1, Tata Consultancy Services 41, Vistaar 2, Syntel 1

OFF-CAMPUS PLACED

Twenty five students of Computer Engineering Department got placed off campus in renowned companies, like Capgemini, Cognizant Technology solutions, Directi, Hexaware Technologies, Intel Security Private Ltd.

HIGHER STUDIES

Approximately 20 students have taken higher studies in renowned universities for programs like MS, MBA, etc.

RESULTS AT A GLANCE

"IT IS NOT YOUR APTITUDE BUT YOUR ATTITUDE THAT DECIDES YOUR ALTITUDE".

SR.NO	NAME OF THE COURSE	APPEARED STUDENTS	PASSING PERCENT-AGE
1	SECOND YEAR SEMESTER-IV	209	79.90
2	THIRD YEAR SEMESTER—VI	210	90.48
3	FINAL YEAR SEMESTER-VIII	181	97.79

Human intuition added to planning algorithms

Researchers from MIT's Computer Science and Artificial Intelligence Laboratory are trying to improve automated planners by giving them the benefit of human intuition. By encoding the strategies of high-performing human planners in a machine-readable form, they were able to improve the performance of competition-winning planning algorithms by between 10 and 15 percent on a challenging set of problems. [Credit: Jose-Luis Olivares/MIT]

On all but the most straightforward problems, however, even the best planning algorithms still aren't as effective as human beings with a particular aptitude for problem-solving -- such as MIT students.

The researchers are presenting their results this week at the Association for the Advancement of Artificial Intelligence's annual conference.

"In the lab, in other investigations, we've seen that for things like planning and scheduling and optimization, there's usually a small set of people who are truly outstanding at it," says Julie Shah, an assistant professor of aeronautics and astronautics at MIT. "Can we take the insights and the high-level strategies from the few people who are truly excellent at it and allow a machine to make use of that to be better at problem-solving than the vast majority of the population?"

The first author on the conference paper is Joseph Kim, a graduate student in aeronautics and astronautics. He's joined by Shah and Christopher Banks, an undergraduate at Norfolk State University who was a research intern in Shah's lab in the summer of 2016.

THE HUMAN FACTOR

Algorithms entered in the automated-planning competition -- called the International Planning Competition, or IPC -- are given related problems with different degrees of difficulty. The easiest problems require satisfaction of a few rigid constraints: For instance, given a certain number of airports, a certain number of planes, and a certain number of people at each airport with particular destinations, is it possible to plan planes' flight routes such that all passengers reach their destinations but no plane ever flies empty?

A more complex class of problems -- numerical problems -- adds some flexible numerical parameters: Can you find a set of flight plans that meets the constraints of the original problem but also minimizes planes' flight time and fuel consumption?

Finally, the most complex problems -- temporal problems -- add temporal constraints to the numerical problems: Can you minimize flight time and fuel consumption while also ensuring that planes arrive and depart at specific times?

For each problem, an algorithm has a half-hour to generate a plan. The quality of the plans is measured according to some "cost function," such as an equation that combines total flight time and total fuel consumption.

Shah, Kim, and Banks recruited 36 MIT undergraduate and graduate students and posed each of them the planning problems from two different competitions, one that focused on plane routing and one that focused on satellite positioning. Like the automatic planners, the students had a half-hour to solve each problem.

"By choosing MIT students, we're basically choosing the world experts in problem solving," Shah says. "Likely, they're going to be better at it than most of the population."

Finally, the most complex problems -- temporal problems -- add temporal constraints to the numerical problems: Can you minimize flight time and fuel consumption while also ensuring that planes arrive and depart at specific times?

For each problem, an algorithm has a half-hour to generate a plan. The quality of the plans is measured according to some "cost function," such as an equation that combines total flight time and total fuel consumption.

The quality of the plans is measured according to some "cost function," such as an equation that combines total flight time and total fuel consumption.

Shah, Kim, and Banks recruited 36 MIT undergraduate and graduate students and posed each of them the planning problems from two different competitions, one that focused on plane routing and one that focused on satellite positioning. Like the automatic planners, the students had a half-hour to solve each problem.

"By choosing MIT students, we're basically choosing the world experts in problem solving," Shah says. "Likely, they're going to be better at it than most of the population."

Encoding strategies

Certainly, they were better than the automatic planners. After the students had submitted their solutions, Kim interviewed them about the general strategies they had used to solve the problems. Their answers included things like "Planes should visit each city at most once," and "For each satellite, find routes in three turns or less."

The researchers discovered that the large majority of the students' strategies could be described using a formal language called linear temporal logic, which in turn could be used to add constraints to the problem specifications. Because different strategies could cancel each other out, the researchers tested each student's strategies separately, using the planning algorithms that had won their respective competitions. The results varied, but only slightly. On the numerical problems, the average improvement was 13 percent and 16 percent, respectively, on the flight-planning and satellite-positioning problems; and on the temporal problems, the improvement was 12 percent and 10 percent.

"The plan that the planner came up with looked more like the human-generated plan when it used these high-level strategies from the person," Shah says. "There is maybe this bridge to taking a user's high-level strategy and making that useful for the machine, and by making it useful for the machine, maybe it makes it more interpretable to the person."

In ongoing work, Kim and Shah are using natural-language-processing techniques to make the system fully automatic, so that it will convert users' free-form descriptions of their high-level strategies into linear temporal logic without human intervention.

[Source: Materials provided by Massachusetts Institute of Technology. Original written by Larry Hardesty.

LiFi - Light Fidelity

Can we imagine an LED bulb being as a point of access for connecting to the Web and ordinary light being used as a medium to carry packet data?
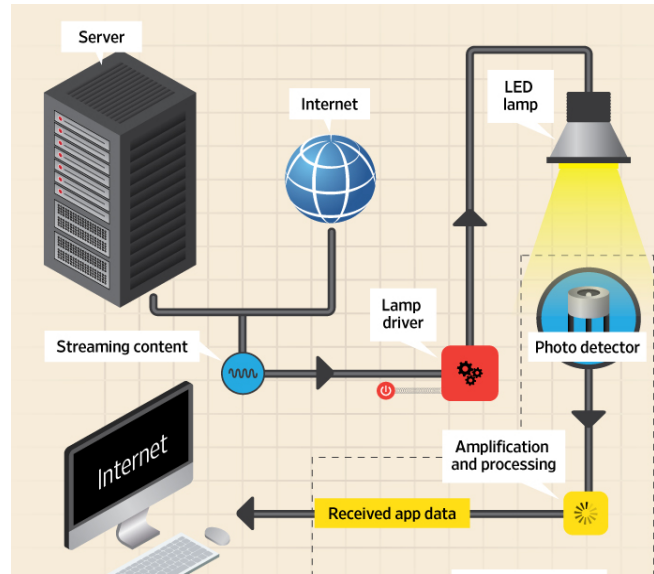
A whole new world wherein a LED bulb would not only give us light but also help us access the Internet might not be too far away, if a new technology called Li-Fi (or Light-Fidelity) goes onboard.

Prof. Harald Haas of the University of Edinburgh, who invented Li-Fi in 2011, experimented the new technology in packed auditorium at the Wipro's Electronics City campus.
He streamed a video from the YouTube on a laptop using light from an LED bulb to access the Internet.He said Li-Fi was a innovative technology that could transform business models, create new opportunities, and was estimated to be a $113 billion industry by 2022. He added that the existing RF (radio frequency) spectrum would not be enough to handle the traffic considering the growth of wireless data communication.
And How does Li-fi work?

• An ordinary LED bulb connected to a device, which in turn is connected to the Web. Stronger the intensity of light faster is the speed of Internet. The packets are carried by the photons of the light.

The packet data flows in via the device into the LED, and is car-

ried by light photons. At the receivers end, light waves carrying the packet data falls on a receiver or a dongle which is connected to the computer.A receiver is is actually made up of photon receiver(can be a solar panel) and connected wire mesh.

Advantages Of Li-Fi

• One of the most useful advantage is that visible light is available for free and cannot be licensed like 3G or 4G.So if Li-Fi technology is used, internet will be available to us at cheaper rates.
• Li-Fi bulbs can also have double benefit of a bulb giving us light as well as internet access
• Li-Fi can be used underwater also. We can install LiFi bulbs in street light so people can access internet during day and at night it can be used as Router to access Internet.

- Li-Fi can be used underwater also. We can install LiFi bulbs in street light so people can access internet during day and at night it can be used as Router to access Internet.
- Longer exposure to RF (Radio Frequency) is harmful for humans but LiFi isn't. Li-Fi is not harmful to humans and it does not interfere with electronic circuits.
- Light cannot pass through walls so packet sniffing is not possible. Even if a packet is tried to sniff, the whole photon (which is carrying the packet) will be destroyed hence there won't be any data loss.
- LEDs are efficient and need no maintenance hence it is very cost effective.
- Speed Of Light is more than any of the Radio Frequencies (RF). In a Lab Experiment a amazingly high speed of 224 gigabits per second was achieved.

-DARSH SHAH

TE-3

MEMRISTOR:A Groundbreaking New Circuit

Today's technology is being driven by resistors, inductors, capacitors ,transistors and have completely changed how life is on earth today. With their help we have advanced tremendously in the field of technology over the past five decades.

Well, in 1971, UC Berkeley researcher Leon Chua theorized the possibility of a fourth type of component, one that would be able to measure the flow of electric current: the memristor. 37 years later, in 2008, Hewlett-Packard claimed to have found out such technology.

Now, what is a Memristor?
Technical definition- A **memristor** is a (hypothetical) microscopic, non-linear, passive, two-terminal electrical component relating electric charge and magnetic flux linkage. Basically, its a resistor that is it can regulate the flow of current but at the same time it can remember the amount of charge that has passed. Memristor is a contraction of "memory resistor", because that is what it exactly does: to remember history.

When you turn off the voltage, the memristor will remember the most recent resistance until the next time you turn it on, whether that happens a day later ,a year later , or ten years later. So basically the memory is non-volatile.
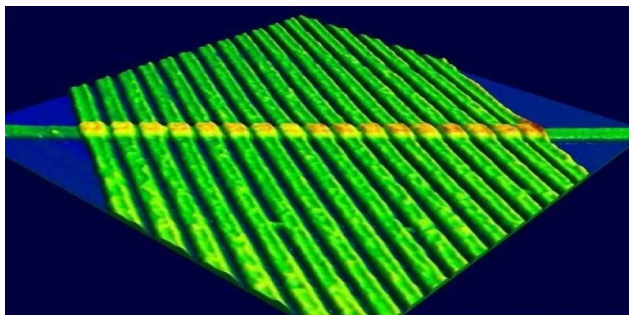
A real life analogy to understand the concept of memristor better:

A tank filled with water is connected using a special kind of pipe that can regulate the flow of water by changing its diameter and at the same time remember the previous diameter. Also, if the water supply is stopped, the diameter of the pipe will freeze until the flow is started again.

If your laptop was made of memristors, just pop off the battery while working on your project, put it back in and your laptop starts from where you had abruptly removed the battery ,no reboot,no recovery, no headaches!!

WORKING:
A physical memristor consists of two platinum electrodes, and the resistance of this device depends on the polarity, magnitude and length. When the voltage is turned off, the resistance remains as it did just before it was turned off. This makes the memristor a nonvolatile memory device.

voltage applied.
And then, the material will become thinner or thicker depending on the polarity of the voltage, thus causing a change in the resistance.
The change in thickness of material is the regulating the flow of current

Construction of TiO$_2$ memristor

R. Stanley Williams needed a switch at the microscopic level for the This is how the memristor would look physically. First experimented by R. Stanley Williams and his team.
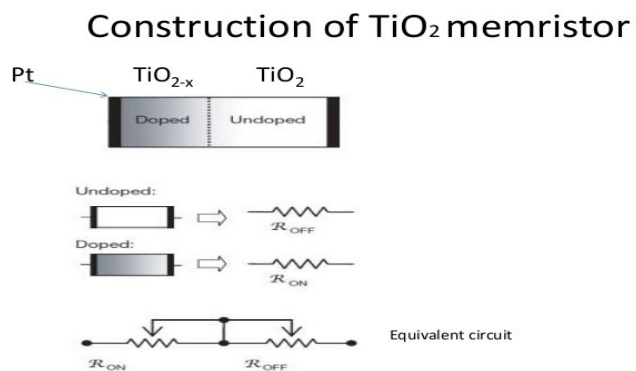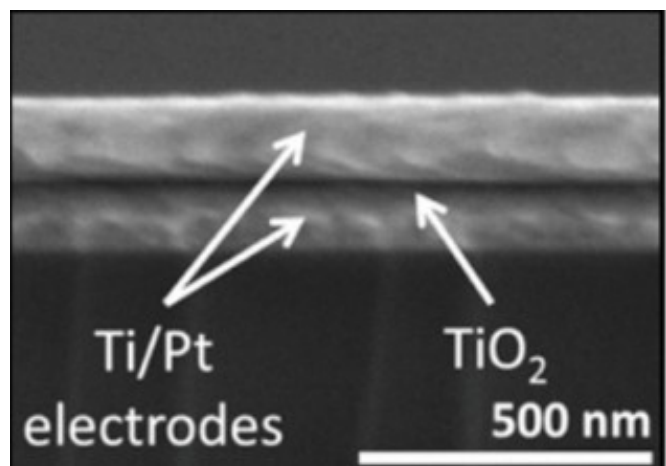
Physical Memristor In the above figure, two terminal memristor utilize titanium dioxide as the resistive material. When a voltage is applied across the two terminals the oxygen atoms in the material disperse towards left or right.
Positive voltage pushes the vacancies from undoped to doped TiO$_2$. Similarly, vice-a-versa for negative

Different Types of memristors

(All are experimental):

Titanium dioxide memristor: Titanium Oxide used as the material for making the memristor. Works on the diffusion of oxygen molecules from doped TiO_2 to undoped TiO_2 and vice-versa.

Polymeric memristor: It has dynamic doping of polymer and inorganic dielectric-like materials that improved the switching characteristics and retention required to create functioning nonvolatile memory cells. They used a passive layer between electrode and active thin films, which enhanced the extraction of ions from the electrode.

Layered memristor: A flexible memristive device comprising a $MoOx/MoO_2$ heterostructure sandwiched between silver electrodes on a plastic foil.

Ferroelectric memristor: It is based on a thin ferroelectric barrier sandwiched between two metallic electrodes. Switching the polarization of the ferroelectric material by applying a positive or negative voltage across the junction can lead to a two order of magnitude resistance variation.

Carbon nanotube memristor: Memristor effect in structure based on vertically aligned carbon nanotubes studying bundles of CNT by scanning tunneling microscope.

Applications (theoretical):-

1. Can be used as a high speed non volatile solid state memory.

2. It can have data access speed similar to RAM and main memory speeds plus they are non-volatile unlike RAM.

3. A very good replacement for the flash memories.

4. It can be used to design Artificial Intelligence models for neural networks. It has such properties that can help us create/fabricate electronic models that can act as synapses (nerve ending used for communication between nerves). So basically, a huge advancement in the field of artificial intelligence.

5. It also has applications in Programmable Logic Devices (PLDs), Signal Processing, control systems, RF-IDs, etc.

6. Very fast and complex computing will become easy thanks to the range Of operating states.

7.It will reduce the size of computers such that a palm top computer may have greater processing speed much more than high speed PCs we have right now.

If the fabrication and application of memristors in day to day electronics starts , it will soon replace transistors and other components and will lead to the rapid advancement it will cause in the field of technology.

## The main question: When is it coming?

HP had announced its commercial use to start by the end of 2016, but it looks like they are still trying to come up with a commercial memristor with collaboration with San-Disk.

However, the experimental use has been for a quite of time. Knowm Inc. has launched the first memristor chips in the market for $220 each but only for experimental use.

No commercial use seen so far of the memristor technology.

CONCLUSION:

This technology still maybe in the prototyping level, but it has given many amazing, astounding and promising results in the experimentations. This technology has infinite potential to make technology cheaper and high grade technology made available to everyone. It will start a new league of electronics and the present technology will become total obsolete. This is my prediction of this technology 30 years from now. With the commencement of the memristor era, the technology will advance to a whole new level and change our lives forever.
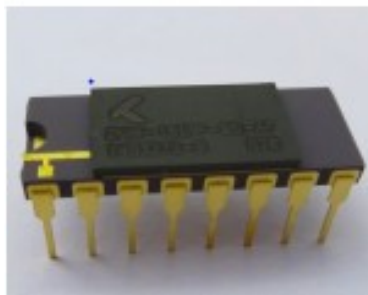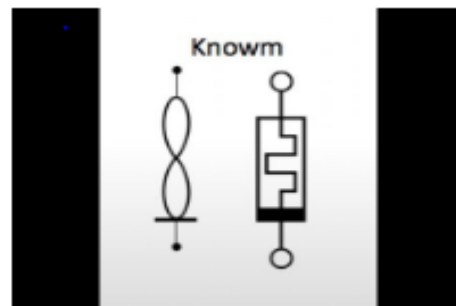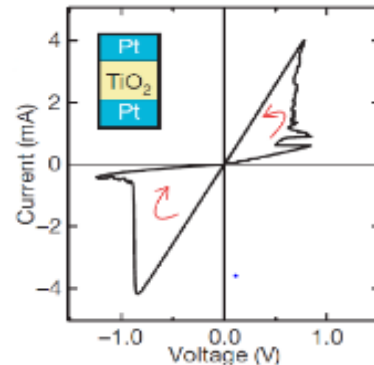
Experimental Memristor by Knowm Inc.

I would like to end the article quoting the inventor of the memristor technology, Mr.Leon Chua,

"If it's pinched it's a Memristor"

Pinched hysteresis loop of Memristor.

Representation of memristor

-Aniket Milind Banginwar
SE4
Roll no. 3

NON-TECHNICAL ARTICLES - ART WORK
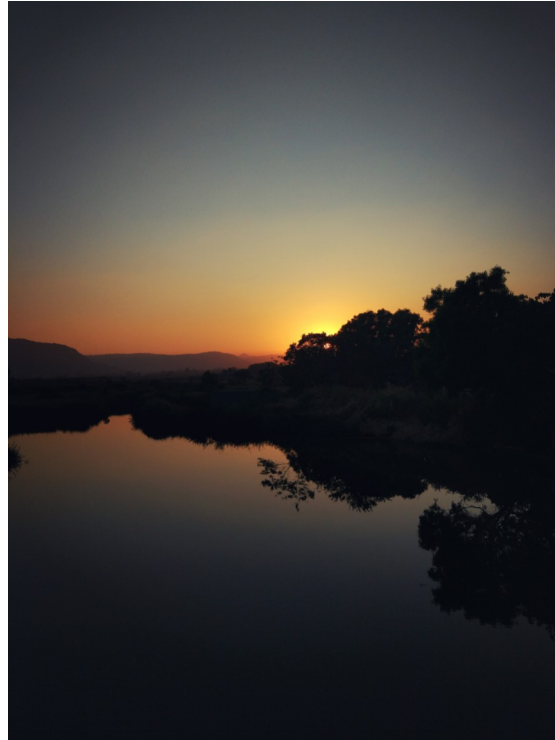

AMAN GUPTA-SE-3

PURAV NAGDA TE-3

MANSI MEHTA-TE-4

AJAY SINGADIYA
TE-4

ANIKET SHETTY
TE-4

AMAN SHETH-TE-4

HITARTH DANI-TE-4

जिंदगी आ रहा हु मैं ...

मुझे रोना तो आता है,
मुझे हसना तू सीखा दे,
मुझे तू जीना सीखा दे,
जिंदगी आ रहा हु मैं ...

मै बेवफा नही तुझसे,
हर वफा कि है मैने,
आज फिर जीने कि राहत जगा दे,
मुझे तू जीना सीखा दे, ...

कुछ खता मेरी भी है,
कुछ शिकवे मेरे भी है,
आज फिर जीने कि तमन्ना जगा दे,
मुझे तू जीना सीखा दे, ...

मुडमुडके तुझे देखता हु,
यादो को जाने क्यू जीता हु,
आज फिर जीने कि वजह जता दे,
मुझे तू जीना सीखा दे, ...

समय ना रुकता किसी के लिये,
मौत तो सबको एक दिन आनी है,
आज फिर जीने कि चाहत जगा दे,
मुझे तू जीना सीखा दे, ...

- शशिकांत रडके

INDIAN ARMY- SERVICE BEFORE SELF

India has well known and one of the finest armies in the world. The Indian army came in existence with independent and has received most structure and feature of the British Indian army. Our army have proved their ability to cope well with difficulties in all theatres of wars been prehistoric time. In whichever war they have been presented victory was always theirs recent time, on mission of peace our army were sent to the Congo, Suez, indo-china and korero.

In last two world wars our army fought in Africa, Europe and Middle East and won laurels for the British Empire, our army served in France and other countries also. Our army has never surrendered. Their aim has always been "do or die".

Since the formation of Pakistan and the freedom of India, the first war was in 1947 itself for the state of Kashmir. From then on there have been several wars that the Indian Army has faced like the Sino-Indian War in 1962, The Indo- Pakistan war in 1965 and again the Indo-Pakistan war in 1971, later Kargil war in 1999 and have returned all with victory. It goes to the credit of the Indian army that the first Victoria Cross went to the credit of an Indian army.

our Indian army to be well organized, and alert they do follow certain principals in life and the standards that they follow is what makes them stand apart from the rest of the world in many ways. The main standards that they possess and cling on till the end are: Firstly Discipline – The Indian Army is well disciplined and trained on a regular basis. Second is the love and respect they build for their country that no conditions could break it. The next is the Do or Die situation. The courage they have cannot be measured in any aspects as they are very much willing to die for their nation. The passion for their nation is something that we as citizens of India should look up and learn.

The three wings of the Indian Army need to be strengthened. It is a pity that some of the leaders of our country failed to foresee the Chinese threat and slowed down defense production. The India-China war has served a useful purpose. With the aid of friendly nations we will soon make up the loss. Let every Indian soldier remember the inspiring message of one of the ablest leaders of India, Sardar Patel:-"The deeds of gallantry you performed in the two Great wars adorn the pages of world history. Even the enemy recognized your merit in war. You proved yourself first-class soldiers, inferior to none in the world. But then you fought for others. Now you have to fight for your own country, your beloved India. "You should prepare yourself for the responsibility which will continue to increase. We have won the freedom. It is for you to guard it. You have to make an all-round effort to maintain and consolidate it. Let the discharge of your duties be your privilege. You will enhance the reputation of your country and the country will be proud of you."

 With more equipment's and proper training, India could be more proud of her Jawans in the coming years and we should respect and honor the soldiers who guard us day and night, sacrificing their pleasures for the safety of the nation.

- Prof. PRADIP MANE

THE REAL RISE

People have role models and all role models themselves have inspirations .All of them have a particular story which seems too much monotonous every time we hear some part of it. All the stories contain struggle, discrimination ,poverty and then comeback after failures. I will be describing a personality that defies the odds and the one, who for me personally is someone who is the real unsung hero people and my mates should know about.

Talking about comeback,
1. He failed his university entrance exam 2 times at Hangzhou Teacher's Institute.
2. He wrote to Harvard for a total of 10 times and was knocked back every single time.
3. At early age he developed a desire to learn English so he rode his bike to nearby hotel and converse with foreigners. He would guide them around the city for free.
4. Without money or connections, the only way he could get ahead was through education.
5. After a great deal of studying, he finally passed on the third try, going on to attend Hangzhou Teacher's Institute. He graduated in 1988 and started applying to as many jobs as he could.
6. He applied to 30 jobs when he was looking for work and was rejected from all of them, including a job at KFC where 24 people applied and they hired everyone except him.
7.He also started a translation company, and on a trip to Seattle, he discovered the internet, inspiring him to start his first legit business, China Yellow Pages. While it is regarded as China's first internet-based company,
China Yellow Pages was also a failure.
8. Against all odds he founded Alibaba Group The Internet Giant which has market capitalization of 255 billion Yuan. He is JACK MA ,the first mainland Chinese entrepreneur to appear on the over of Forbes. He is the richest man in China and 18th richest person in the world, with an estimated net worth of $29.7 billion .

Thanks to Google ,
Indian Figure is somewhere near 1,894,563,000,000 rupees. (Something we cant even count easily in our books) . Jack Ma is the kind of exceptional and talented leaders who redefine the path of success. He lacked any technology and computing background and
that makes his success even more astounding than the likes of Mark Zuckerberg and Bill Gates. When he started his career as an English teacher, few could have predicted him to become an internet mogul. Unsung hero, as I described him above ,who knows that the 5-foot- tall Chinese man with a friendly looking face, is the chairman of Alibaba's
 record-shattering $25 billion IPO (Initial Public Offering), which now sits as one of the largest companies on the market.
Synonymous with rejection but unfazed by it . Bouncing back from setbacks was something that he was born with , maybe .

- Sahil Mehta SE3 -46

THE ERA OF AURA

An aura, the electromagnetic field surrounding one's body signifies lot many things about oneself. But, various scientists have developed some techniques to focus on the aura and develop relation between science and spirituality. In parapsychology and spiritual practice, an aura is a field of subtle, luminous radiation surrounding a person or object like the halo or aureole.

It is a subtly pervasive quality or atmosphere seen as emanating from a person, place, or thing. We have observed this aura-energy field surrounding the heads of different spiritual leaders across traditions. But the fact is that is just not only surrounds the head but the whole body. This aura represents physical, mental, emotional as well as spiritual energies of one person.

Aura of a person is as depicted in the below image, which is the combination of colored frequencies where each color depicts some characteristics often used by aura readers to define the person's aura. For the detection of aura scientists have developed various software and instruments, because the vibrations of aura are very fine. By reading the aura one can interpret any unsaid information.

Research have made it clear that the electromagnetic field surrounding the whole body is said to be aura and it has direct connection to the person's health. The person who has sound health at physical, mental, emotional and spiritual level has a bigger and brighter aura and vice versa in the case of unhealthy person. The solid matter is made up of energy which is vibrating at the specific frequency, this vibrations gives size, shape, texture to the object. These matters are made of electrons, protons, neutrons, etc. which vibrate to generate small electric impulse, which causes magnetic field to get developed surrounding the body. The bio-photons released by our body is captured indicating the energy level of our chakras and state of the aura. If any damage or low energy level in any chakra, which have connection to the endocrine glands are distinctly visible, enabling to predict where and why energy is blocked. Potential problem areas are revealed, giving you the chance to heal the imbalances now and avoid future problems. The aura can thus be used to even predict any future problems that would develop in human body gradually as time passes.

Harry Oldfield, inventor, scientist, has developed a photo-imaging system that reveals the human energy field (aura), known as PIP which stands for Polycontrast Interference Photography. He has developed various means of analysis and rebalancing energy levels. Harry Oldfield developed a scanner which could provide a real time, moving image of the energy field. He believed that the future of analysis lay in finding an effective scanner which can 'see' imbalances in the energy field rather than disease in the physical body.

This system became known as Polycontrast Interference Photography or PIP. Harry thought that the human energy field might possibly interfere with photons – 'energy packets' of light – or even what might be called 'subtle energy photons' in some way. He decided that ambient (surrounding) light would be interfered with by the field both when the incident ray travelled towards the object and when the reflected ray bounced off the object. In the main, the 'object' of his interest was human beings.

He devised a computer program which would analyze the different light intensities being reflected from the person or object being scanned. This system is at the same time deceptively simple and enormously accurate in the hands of people who know both how to operate it and what they are looking at.

Harry says: "We believe that we are showing up an energy interaction with light, which is giving us an insight into the energy counter-part, the etheric template on which our physical molecules are strung.

To see the body's energy field with PIP, ideally the person is in a room with full spectrum lighting at a controlled output, standing against a white backdrop. The picture is taken with a digital video camera which acts like an artificial eye. A lead from the camera acts like an optic nerve connecting it to a computer which acts like an artificial brain. The program which runs the system is the artificial thinking process which makes sense of all the millions of bits of information. The computer screen then displays the end project of what the 'brain' has seen. In effect what we have achieved here is a system which can see the energy field from and around the body in much the same way as people with gifts of vision can. Of course technology cannot match the details and intricacies of these people with gifts, but future developments in the PIP system might bridge some of the gaps.

The PIP system shows up many patterns and colors which a trained eye can relate to a person's energy balance and well being and although some of these things might be connected to health we emphasize that the system does not take the place of medical examination or diagnosis."

FROM-
Nilakshi Pokharkar
TE-3

50

HALL OF FAME

FIRST YEAR M.E. (MAY-2016)

KOGNULE SNEHAL MARUTI

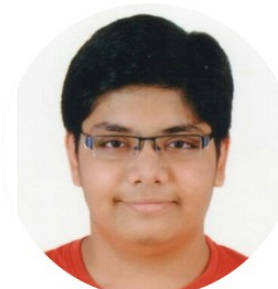AGGREGATE: 8.91

KHAN SAMEERA

AGGREGATE: 8.36

FIRST YEAR (MAY-2016)

BANGINWAR ANIKET MILIND

AGGREGATE: 9.39

DAND MAYANK RAJESH

AGGREGATE: 9.35

SECOND YEAR (MAY-2016)

DESPANDE SALIL SANJIV

AGGREGATE: 9.785

VAISHNAVI BALACHANDRAN

AGGREGATE: 9.66

THIRD YEAR (MAY-2016)

AMIN SALONI MOHANDAS

AGGREGATE: 8.48

SHAH SAACHI HEMAL

AGGREGATE: 8.48

VORANI NISHANT RAJESH

AGGREGATE: 8.415

PAWAR RUTUJA RAJESH

AGGREATE: 8.415

FOURTH YEAR (MAY-2016)

BANGALORE AKSHATA JAGADEESH

AGGREGATE: 9.385

KAMAT KAVITA GANESH

AGGREGATE: 9.30

PUBLICATION COMMITTEE

Reviewers- **PROF. UDAY BHAVE,**

PROF. VIDYULLATA DEVMANE,

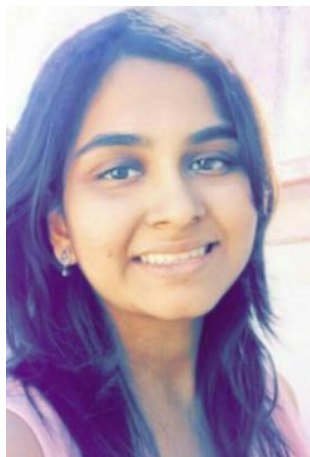*Coordinator* – **PROF. SHAHZIA SAYYAD**

Content Organizer- **PROF. TINA MARU**

CHIEF EDITOR
TINA MARU
ASSISTANT
PROFESSOR

VAISHNAVI
BALACHANDRAN
TE-3

PRATIDNYA
SAWANT
TE-3

MANSI MEHTA
TE-4

TUSHAR MUSALE
TE-D