

IEEE VIT STUDENT BRANCH



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About IEEE

Institute of Electrical and Electronics Engineers (IEEE), an association dedicated to advancing innovation and technological excellence for the benefit of humanity, is the world largest professional technical society. It is designed to serve professionals involved in all aspects of electrical, electronic and computing fields and related areas of science and technology that underlie modern civilization. IEEE's roots, however, go back to 1884, when electricity was just beginning to become a major force in society. Over the decades that followed, with IEEE's continued leadership, the societal roles of the technologies under its aegis continued to spread across the world, and reach into more and more areas of people's lives. The professional groups and technical boards of the predecessor institutions evolved into IEEE Societies and Student Branches. In 21st century various IEEE student branches were formed in esteemed engineering colleges of India, one of which is the IEEE VIT student branch. It came into existence on 12th Nov, 1999 and celebrating 15 years of glory. This year the torch was carried by Prof. A.M. Chopde, Head Electronics Dept. who was the branch Mentor and Prof. Suhas Bhise, Electronics Dept. as the Branch Counselor.

Objectives

The branch's core purpose is to foster technological innovation and excellence for the benefit of humanity. The purpose of the branch is dissemination of knowledge of theory and practice of all aspects of electrical, electronics, communication and computer engineering, as well as computer science, the allied branches of engineering and the related arts and sciences. The branch will serve as a platform for students for their professional and educational development.

Activities 2013-14

Workshops:

1. MATLAB WORKSHOP: 4TH, 5TH, 6TH SEPTEMBER 2013

MATLAB is used worldwide by Academic Researchers and Scholars for simulation of their work. Thus this workshop provided a platform for the students to use such a robust software and also learn how to make use of various toolboxes, Simulink, Image processing, Speech processing and various programming skills.

2. GRAPHICS DESIGN WORKSHOP: 12TH & 13TH SEPTEMBER 2013

This workshop consisted of Adobe Photoshop history, demo of some basic tools, some special effects, clubbing of two photos and other applications of Adobe Photoshop. Along with this Corel draw was also taken, which consisted of setting up page layout, working and filling of shapes, importing and exporting objects, creating artistic text, blend, contours etc.

3. WEB DESIGNING WORKSHOP: 16TH & 17TH OCTOBER 2013

This workshop consisted of basic history of web and browsers, HTML and CSS, methods of parsing the DOM, hiding and showing, tutorial and Ajax and node JS, bootstrap front-end framework and angular JS, canvas and gaming.

4. MATLAB WORKSHOP FOR SAE STUDENTS: 18TH & 19TH OCTOBER 2013

The workshop was conducted by SAE Collegiate Branch in collaboration with IEEE Student Branch VIT. The workshop mainly covered the Basic matrix operations, creating a vector and plotting styles.

5. PCB WORKSHOP: 15TH, 16TH, 17TH JANUARY 2014

The workshop gave complete knowledge of PCB designing and manufacturing with hands on experience. Theory session on using 'Diptrace' software was conducted. The practical session was conducted by Prof. M. V. Rane who demonstrated the procedure of PCB manufacturing.

6. MICROCONTROLLER WORKSHOP: 30TH & 31ST JANUARY 2014

Microcontrollers are widely used in industries for various applications such as automation, robotics etc. The workshop provided complete support to students so that they could make use of Microcontroller for their applications by teaching them the architecture of 8051, Instruction sets, programming and actual hardware implementation.



7. LATEX WORKSHOP: 10TH MARCH 2014

Latex workshop was taken just to give the students idea about making the report in a simpler manner. Basic LaTeX commands, syntax for various equations and insertion of figures were taught in the workshop.

Guest Lectures:

1. MACHINE VISION AND PROJECTS: 8TH AUGUST 2013

IEEE student branch organized a workshop on Machine Vision & Projects conducted by Prof. (Dr.) Ganesh Ramakrishnan. He gave brief idea about Features & parameter induction for statistical modeling, kinds of propositional features, a primitive formulation, Performance calculation, Sequence labeling, Dimension reduction by disjunctions, Feature classes, Subset relation between subset classes, Reconstruction property of feature classes. The lecture was organized especially for B.E. students.

2. NETWORKING THE CLOUD: 22ND AUGUST 2013

IEEE student branch organized a workshop on networking the cloud conducted by Prof. (Dr.) K.K Ramakrishnan. He gave brief idea about software & infrastructure as service, cloud computing benefits, server virtualization in data centers, virtual desktops and open stacks, applications of cloud networking.

3. OPTIMIZATION TECHNIQUES: 13TH MARCH 2014

IEEE student branch organized a workshop on Optimization Techniques and its related projects conducted by Prof. (Dr.) Mukesh Motvani. He gave brief idea about Optimization techniques: nature and PSO, Star & ring topologies, GBEST, PSO parameters: no. of particles, iteration, inertia co-efficient and advantages, Multi objective generic algorithm, Simulated annealing process and its algorithm, Ant colony optimization: pheromone model, probabilistics rule, pheromone update and its algorithm.

Industrial visits:

1. VACPL (Venkateshwara Automation and Controls Pvt. Ltd.): 13TH FEBRUARY 2014

VACPL is situated in MIDC, Chinchwad which is around 30 km from VIT. We learnt a lot about control panels and its working & applicability to the open world. The difference between theoretical and practical knowledge was easily observed. Students were really were happy as they learnt many new things as well as they were updated to the recent trends in industries.

2. BHARAT SANCHAR NIGAM LIMITED (BSNL), CHINCHWAD: 13TH FEBRUARY 2014

The company is a G-MSC, i.e. a GATEWAY-MOBILE SWITCHING CENTER. Here, BSNL data from all over Maharashtra is switched. In the first half of the session, the instructor showed us various ways in which the huge amount of data traffic is efficiently handled, the multiplexing techniques employed to reduce the hardware and explained the steps they take in case of a failure. He also explained the concepts like HLR, VLR, etc. as well as the reasons for call dropping, less connectivity during some hours of the day etc. In the next half of the session, we were shown a mobile antenna transceiver over which various lines such as calls, text data, 2-G and 3-G connections are transmitted and received. He also talked about the upcoming 4-G technology, its feasibility and benefits.

3. PARI (Precision Automation and Robotics India Ltd.): 9TH APRIL 2014.

PARI is a global automation solution provider using world class robotic products and technologies. It has state of art technology centre with R&D facilities. We learnt a about machine tool handling, press automation, welding automation, liquid application automation, forging automation, gauging automation, control panels and its working & applicability to the open world. We thoroughly got to know how the automatic car parking system is implemented. The difference between theoretical and practical knowledge was easily observed.



Team 2013-2014

Branch Mentor	Prof. A.M. Chopde Head, Electronics Dept.
Branch Counselor	Prof. Suhas Bhise Electronics Dept.
Chairperson	Parikshit Jagtap
Vice Chairperson	Sarvesha Uplekar
Secretary	Shruti Dhumal
Vice Secretary	Tejas Barhate
Treasurer	Sanika Gawhane
Technical head	Kalyani Rajas
Pub. & design head	Vivek Kharche
Executive committee	Ojas Pandav, Kojashree Kakariya, Sujit Deshpande, Bankesh Pawar, Salma Shaikh, Prachi Kore, Shraddha Dahane, Shubham Joshi, Shubham Gattani, Brij Malhotra, Yash Gorana, Akash Balani.

