

IEEE STUDENT CHAPTER, FCRIT, Vashi

The **Institute of Electrical and Electronics Engineers (IEEE)** is a professional association with its corporate office in New York City and its operations center in Piscataway, New Jersey. It was formed in 1963 from the amalgamation of the American Institute of Electrical Engineers and the Institute of Radio Engineers. Today, the organization's scope of interest has expanded into various related fields. As of 2018, it is the world's largest association of technical professionals with more than 423,000 members in over 160 countries around the world. Its objectives are the educational and technical advancement of electrical, electronics and telecommunications engineering, computer engineering and allied disciplines. From the third year B.E. students, ten members were selected as the council members of the IEEE Student Chapter, FCRIT for the academic year 2017-18. The duration of the council was for one year.

Council Members:

- Manasi Bhavsar (Chairperson)
- Kunal Kulkarni (Vice Chairperson)
- Anindita Sharma (Secretary)
- Sarah George (Treasurer)
- Anish Kanse (Director of Operations)
- Merlin Vincent (Director of Operations)
- Joy George (Editor)
- Joyrin Fernandes (Editor)
- Saurabh Killekar (Membership Development Officer)
- Ashutosh Kavitkar (Membership Development Officer)

Branch Counselor: Mrs. Bindu R

The following events were conducted under IEEE Student Chapter, FCRIT, Vashi for the academic year 2017-18.

Events	Contests	Magazine
<ol style="list-style-type: none"> 1. Introductory Session 2. Seminar on “How to write and present a Technical Paper” 3. Robotics Workshop 4. Workshop on Python 5. Workshop on ‘App development’ 	<ol style="list-style-type: none"> 1. Robosoccer Competition 2. Techpulse: (State level) <ul style="list-style-type: none"> • TechZoah: Paper presentation contest • TechnoVentio:n: Project competition 	<p style="text-align: center;">Magazine ‘LiveWire 2018’</p>

A. Introductory Session

This session was organized for all the IEEE members to inspire a global community to innovate for a better tomorrow. A short talk was held by Racheal Dias - Public Relations Coordinator and IEEE Xtreme Ambassador 2017. She gave us a briefing about IEEE and its functioning. She provided an insight into IEEE's core purpose which was to foster technological innovation and excellence for the benefit of humanity. IEEE Student members from different branches and semesters were part of this session and interacted with the council regarding their expectations on the activities.

B. How to Write a Technical Paper

IEEE-CRIT had organized a short talk on “How to write and present a Technical Paper” on 9th January 2018 at 4:30 pm. The speaker for this session was Dr. Bindu. S. (HOD, Electrical Department, FCRIT). She has pursued her PhD from VJTI and in her career span she has written and published several papers. There were 97 participants from each department (Electrical, Electronics and Telecommunication, Information technology, Mechanical, and Computer). The session included discussions on the basic requirement for writing a technical paper, the guidelines, literature survey, choosing the title, formatting, plagiarism and presentation. The session involved active participation from students of various branches.



C. Level 1 Robotics

IEEE-CRIT had conducted a level-1 robotics workshop on 18th and 19th January, 2018. There were 72 students divided into 18 groups with each group consisting of 4 members. The participants mainly comprised of students from the 1st, 2nd and 3rd years. On the first day the students were taught the connections involved in making a level 1 Bot and were made to implement it. Each group was provided with all the necessary components. Students were taught basics of robotics, its connections and working, working of a DPDT switch and the control of a bot. There was a competition held for the groups on the 2nd day titled 'Robo Soccer'. The two winning teams from 2nd and 3rd year were given cash prizes.



D. Python Coding Workshop

IEEE-CRIT had organized a Python workshop on 21st February 2018 that gave a training on the basics of Python programming language. It was a 3-hour workshop conducted by 3rd year B.E. students. There were 48 participants divided into 24 groups with 2 members each. The students who took part in the workshop were from the 1st and 2nd year. The workshop started with an introduction to Python

language, which is a widely used high-level, general-purpose, interpreted, dynamic programming language followed by some examples covering topics like Basic syntax, Looping, Additional functions, Information on few applications and a Game on library pygame

Guides: Jariel Joash Gojar, Joel Miranda, Robin Eliezer Andrew, Dylan D’Souza



E. App Development Workshop

IEEE-CRIT had organized an App Development workshop on 7th March 2018 which gives hands on experience. It was conducted by 3rd year B.E. students. There were 36 participants from 1st, 2nd and 3rd year. The workshop started with the introduction to block coding, real time usage of App followed by some examples covering topics like Basic syntax, Looping, Additional functions and a few applications useful in real time

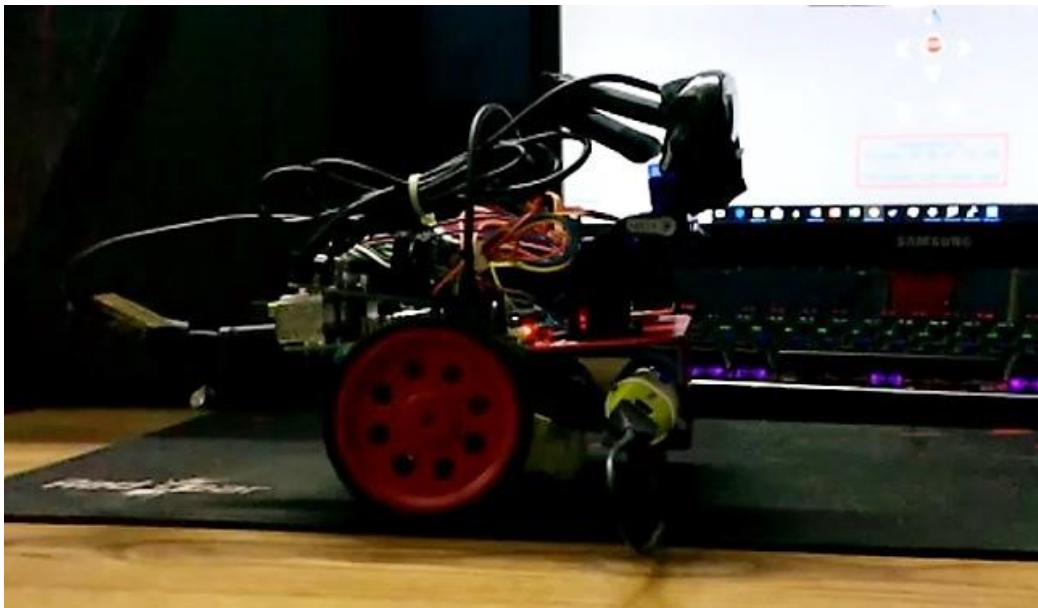
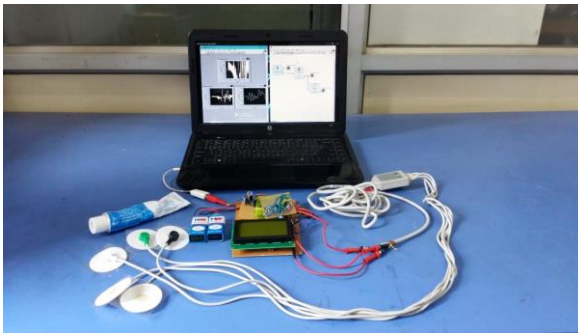
Guides: Vaibhavi Patil , Nikhil Shah, Rahul Fatnani, Mohit Patil



F. TECHPULSE

IEEE-CRIT had organized a two-day State Level Competition named “TECHPULSE” on 23rd and 24th of March 2018.

Day 1: TECHNOVENTION conducted on 23rd March 2018 provides a great opportunity for the young minds to represent their projects. Mr. Nawaz Hussain, who has completed his Master’s from IIT Bombay and was pursuing his PhD from IIT Bombay, was invited as the judge for the Project Competition. 18 teams had participated out of which the best two projects were awarded with a cash prize. The winning projects were “Autonomous Driving Car using Convolutional Neural network” and “Sign Language Translator”. Consolation prizes were given to “Amphibot”, and “Electro Gastro Pelvic Graphy”



Day 2: TECHZOAH

TECHZOAH is a platform for young engineers to present their research works in the field of Engineering. A Technical Paper Presentation Competition was held on 24th March 2018 in the college premises. Mr. Ram Bhosale who was pursuing his PhD from IIT Bombay and had completed his Master's from FCRIT, was invited as the judge for the competition. 21 teams had participated in the competition and the best two were awarded with a cash prize. The first prize was given to the paper titled "Indian Language Identification using Cochleagram based LPQ texture descriptor and Artificial Neural Network Classifier" by Ashish H. Jog, Omkar A. Jugade and Atharva S. Kadegaonkar and the second prize to "FPV Surveillance Bot" by Jetin Mathew and Shubhashish Bhattacharya.

Abstract: For a human translator, to identify more number of languages and to translate it accurately is difficult. The topic of identification of a spoken language has become an active research field in the community of speech processing. As language identification analysis systems are evolving, their multilingual capabilities are becoming more important. In this paper, a two level identification system for four Indian languages: Malayalam, Kannada, Manipuri and Marathi is proposed. In the first level, the approach converts the input speech signals into their corresponding Cochleagram Visual representation followed by their feature extraction using Local Phase Quantization (LPQ) texture descriptor. In the second stage the system identifies the spoken language using Pattern Net classifier. 70% samples are used for training and rest 30% for testing of neural network. The overall accuracy obtained is 91.6%.



IEEE-CRIT Student Chapter (2017-18) released the magazine "LIVEWIRE 2018"

IEI STUDENTS' CHAPTER

The Institution of Engineers (India) [IEI] is a statutory body to promote and advance the engineering and technology, established in 1920 and incorporated by Royal Charter in 1935. It is the largest multi-disciplinary professional body of engineers encompassing 15 (fifteen) engineering disciplines with a membership of more than 820 thousand, and serving the nation for more than 9 decades. All the students of electrical department are members of the IEI students chapter. From the second year students four members are selected as the council members for the academic year 2017-18. The duration of the council is for one year.

COUNCIL MEMBERS:

- Saud Shaikh
- Utkarsh Mishra
- Khushboo Zope
- Shraddha Pawar

Advisor: Mrs.Divya Sajeesh

The following events were conducted under IEI for the academic year 2017-18

IEI EVENTS 2017-18

- Mini Project competition
- Intra departmental quiz
- Expert lecture

Mini Project competition:

An intra departmental quiz competition was held on 22/07/2017. Twenty groups of 4 members each participated in the competition. The groups were judged by Mr. Ramachandra Bhosale, Research scholar from IIT, Bombay. First prize was awarded to group with title “Weather monitoring system”, second prize for “single phasing preventer and overload protection for three phase induction motor” and third prize for “Lock using Arduino”.Cash prize and certificates were awarded to the winning teams.

Quiz:

An intra departmental quiz competition was held on 19 January 2018. The response of students from 2nd and 3rd year was good so an elimination round was held to select the students for the final competition. Around 50 students participated out of which 20 were selected and 4 teams of 5 members each were formed. The teams were formed in a fair manner Technical and non-technical rounds were conducted. Teams were very competitive for each and every round held.

Expert Lecture:

The students of FCRIT were guided by experts on various topics. Around 17 expert lectures were conducted by the electrical department for students of semester 8, 6 and 4 by experts from different fields. The lectures were on various topics related to the subjects that the students study. The lectures conducted are as follows:

Expert Lecture FH-2018			
Sr. No.	Date of conduction	Speaker	Title
1	22/01/2018	Mr.Prathamesh Joglekar,Senior Engineer L&T ,Mumbai	Impact of Electric Vehicle on Electrical power system
2	09/03/2018	Ms. Komal Gaikwad,Electrical Engineer, ETAP Automation , Vashi	Relay coordination and Discrimination
3	23/03/2018	Mr.Nerus Fernandes,Advait Electric Design,Turbhe	Industrial drive
4	22/01/2018	Mr.Prathamesh Joglekar,Senior Engineer L&T ,Mumbai	Impact of Electric Vehicle on Electrical power system
5	09/03/2018	Mr.Ramachandra Bhosale,Phd Scholar IIT, Bombay	Modelling of Induction machine in d-q reference frame
6	28/02/2018	Mr.Jaipreet Singh, Head Marketing & Finance, Saini Electrical &Engineering Works,Mumbai	Advancements in Electric Traction Motors
7	16/02/2018	Ms.Maitreyee Deshmukh, SIGCOE, Koparkhairne	Modelling of Buck converter using state space averaging for first order control
8	23/03/2018	Ms.Rupali Saha, Product Development Engineer, Autodata Company, Nerul	Industrial applications of microcontrollers
9	16/02/2018	Mr.Swapnil Tulsankar, Team Head, Business HR Partner Pidilite Industries, Mumbai	Project management
10	31/03/2018	Ms. Komal Gaikwad,Electrical Engineer, ETAP Automation , Vashi	Fault Analysis and Mitigation
11	15/03/2018	Mr.Ketan.Jore, Garduate Engineer Trainee, Primetals Technologies India Pvt.Ltd,Mumbai	Maximum power point tracking system for solar PV panels
12	09/03/2018	Mr.Ramachandra Bhosale,Phd Scholar IIT, Bombay	EMI-EMC issues in power Electronic converters

13	09/03/2018	Ms. Komal Gaikwad, Electrical Engineer, ETAP Automation , Vashi	ETAP application in power system and electrical networks
14	24/03/2018	Mr.Ketan.Jore, Graduate Engineer Trainee, Primetals Technologies India Pvt.Ltd, Mumbai	Hot Rolling and Cold Rolling Process of Metal Sheets
15	09/03/2018	Ms. Komal Gaikwad, Electrical Engineer, ETAP Automation , Vashi	ETAP application in power system and electrical networks
16	23/03/2018	Mr.Nerus Fernandes, Advait Electric Design, Turbhe	Industrial drive
17	06/02/2018	Dr. .Mini Rajeev, Associate Professor, Electrical Dept, FCRIT, Vashi	Modelling and designing feedback controller for DC to DC converter
18	03/03/2018	Mr.Prajof Prabhakaran, Phd Scholar, IIT Bombay	Digital Signal Controllers and their Application in Power Electronics

ELECTRICAL ENGINEERS STUDENTS ASSOCIATION (EESA)

Committee Members (2017-2018)

Sr. No.	Post	Name
1	Chairperson	Inshal Khan
2	Secretary	Aishwarya
3	Asstt. Secretary	Mitalee B.
4	Treasurer	Meera Nair
5	Magazine Editors	Sreehari S. , Jyotsna A.
6	Sponsorship Head	Sutej Mota
7	Programme Co-ordinators	Kaveri P. , Avadhut G., Sutej Mota , Mayuri G. , Shweta H., Prajakta N., Ankita P., Nincy G. , Jersan G., Renuka C. ,

REPORT OF EESA (2017-18)

EESA (Electrical Engineering Student Association) is an organisation that aims at all round development of electrical engineering students technically and culturally. EESA conducted workshop and events under fest named Torque 2K18, a techno-cultural fest for electrical students only.

Activities conducted under EESA during July 2017 to March 2018

1. Endeavor Seminar:

Date – 03/ 08/2017

Sr. No.	TOPIC	CLASS
1	“Preparation of Competitive Exams like MBA, GRE etc.”	Sem 3 (Electrical)
2	“ Profile building for higher studies abroad”	Sem 5 (Electrical)
3	“ Education Abroad”	Sem 7 (Electrical)

2. Maintenance Workshop of Electrical Equipment:

Date -18/10/2017

Course conducted by – Mr. Sawant and Mr. Shashank

Class: Sem 3 (Electrical)

No. of Participants: 38

3. Social Activity: Cleanliness Campaign

Date – 03/02/18

Class – Sem 4, 6, 8 (Voluntarily around 90 students)

Description: A cleanliness drive was organised on Saturday, 3rd Feb. 2018 with permission from NMMC with an objective of enhancing awareness among teenagers to keep their environment clean. Students were divided into a no. of groups and given material like bags and hand gloves. Area around Mini sea shore in Vashi was selected to carry out the activity. Good response was seen from all the students.

4. Technical Events under Torque – 2k2018

Many technical events under EESA (2017-18) were organised for Electrical students of sem 4 and 6 to test their technical skills and capabilities.

Date: 17/2/2017

Sr. No.	Time	Event	Winners	
			1st prize	2nd prize
1	9.30 am	Technical Quiz	Shivam Maurya, Prajakta Makhi (sem 4)	Saurabh Shelke, Pratik Raut (sem 4)
2	11.45 am	Pirates of the circuit	Bennedict and Merlin (sem 6)	Anindita and Shekhar (sem 6)
3	1.45 pm	Melt the Metal	Bennedict and Merlin (sem 6)	Varun Patil and Bhavesh G. (sem 4)