# ARMY INSTITUTE OF TECHNOLOGY, PUNE **DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING**

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"Technology is best when it brings people together." Matt Mullenweg, Social Media Entrepreneur

#### **HoD Column**

#### **Emerging Areas**



Industry 4.0 demands smart systems integrated with intelligence to have a human-machine interface. Following are the nine emerging areas which are going to drive the world in next few years.

- 1. Artificial Intelligence (AI)
- 2. Internet of Things (IoT)
- 3. Block Chain
- 4. Robotics
- 5. Quantum Computing
- 6. Data Sciences
- 7. Cyber Security
- 8. 3D Printing and Design
- 9. Virtual Reality (VR)

Electronics and Telecommunication Engineers should prepare themselves to work in some of these areas like IoT, AI, Robotics, Data Science in near future. Our department plans to organize seminar, workshops and guest lectures in IoT, Robotics, Data Science to make the students aware about these technologies. The faculty members are also upgrading themselves in some of these areas. The students should also start doing value added courses or MOOCs in these subjects.



## **Meetings**

#### **AAC meeting Nov 2019**



Academic Advisory Committee meeting was conducted on 8 Nov 2019.

#### **AAC Members:**

- Mr. Abhijit Deogirikar, Chairman & MD, Coppercloud IOTech Pvt Ltd.
- Prof.Dr. Y. Ravinder, Professor & Head, Dept. of Electronics Engg., PICT, Pune

Mr. Baikunthnath D., Alumni AIT

#### **Internal Members:**

Dr. B. P. Patil, Principal, AIT Prof. Dr. G. R. Patil, HOD E&Tc

Prof. Dr. Surekha K S Prof. Dr. P. B. Karandikar

Prof. D. G. Auradkar

#### **Student Members:**

Mr.Sushil Dhembre, BE E&TC Ms. Ashwini Patil, BE E&TC

#### **Staff Co ordinators:**

Ms. Snehal Marathe

Ms. Rajashree Suryawanshi

Ms. Dhanashri Patil

Initially last AAC minutes of meeting were briefed by him by HOD Dr G R During the presentation, suggestions given by the committee members are as follows:

#### **Agenda**

- Discussion on Academic Performance
- **Industry-Institute Interaction** Initiatives
- Placement & Higher Studies
- Revised Curriculum for SE to BE
- **Student Projects**

The meeting was over with concluding remarks from Dr G R Patil giving assurance for implementing the valued suggestions of AAC.

## Staff Activities

Following Faculty Completed their PhD.
Congratulations!!!

Dr. (Mrs.) Renuka Bhandari Dr. (Ms.) Shraddha Oza

## Students Activities



IPTSE is the India's first Intellectual Property Olympiad which was joint initiated by ASSOCHAM and ERICSSON on July, 2018 with the objective to promote intellectual property rights awareness (copyright, patents, trademark, geographical indication, industrial design and trade secrets) among the Indian youth.

In the college category Amit Joshi secured All India Rank 3 and was awarded by Mr. Suresh Prabhu at Taj Hotel New Delhi on 3 July 2019.



# **Department Activities**

#### **Workshops**

#### **Workshops by AIT Remote Center**

Three workshops were organized under the 'Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT)', funded by the Ministry of Human Resource Development, Government of India. The workshops were conducted by IIT Powai, through our remote center (AIT Pune, RC ID: 1407). Dr. G. R. Patil, Head of the Dept., and the remote centre coordinators Dr. Renuka Bhandari and Dr. Harjeet Kaur, coordinated the workshops.

#### **Workshop on Python**

A one day 'Python' was conducted on Saturday, 22<sup>nd</sup> June 2019 from 9.30 AM to 6.00 PM. There was live interaction between the participants at the Remote Center and 'Python' experts at IIT Bombay. Mr. Praveen Hore, Assistant Professor of the computer department was appointed as a course coordinator for the workshop. About 40 faculties from AIT & other institutes attended the workshop.



(Mr. Praveen Hore is conducting the workshop)

#### **Workshop on LINUX:**

A one day 'Linux' workshop was on Friday, 23<sup>rd</sup> August 2019 from 9.30 AM to 6.00 PM. Dr. Shraddha Oza was appointed as a course coordinator for the workshop. Dr. G R Patil Professor & About 16 faculties from AIT & other institutes attended the workshop.



(Faculties from AIT & other institutes are attending the LINUX workshop)

#### **Workshop on R Programming**

A one day 'R Programming' workshop was conducted on Saturday, 9th November 2019 from 9.30 AM to 6.00 PM. Dr. G R Patil was appointed as a course coordinator for the workshop. About 10 faculties from AIT & other institutes attended the workshop.

#### **Other Workshops**

#### Workshop on PCB Design



(Mr. Ranjeet Singh is conducting the workshop)

A one day workshop on 'PCB Designing & Circuit Simulation' was conducted on 3<sup>rd</sup> August 2019 for SE students. Mr. Ranjeet Singh, CEO of Nutan Infotronics was the Resourse Person for this workshop. In this workshop hands on practice of Proteus with the help of a simple circuit of a voltage regulator was given.

Hands on practice to build voltage regulator circuit using eagle software was demonstrated. This demonstration of actual PCB designing on a copper clad board was done for various circuits.

Ms. Pragati Rana & Ms. Dhanashree Patil, Assistant Professors of the department coordinated the workshop.



(Group Photo of PCB Designing Workshop)

#### One week FDP on Python Programming with Industry Perspective

One week FDP Python Programming with Industry Perspective AIT remote centre under IITDM, Jabalpur jointly organized by Electronics and ICT through National Academies Knowledge Network under "Scheme of financial assistance for setting up of Electronics and ICT Academies" by the Ministry of Electronics and Information Technology (MeitY), Government of India. AICTE / UGC / NBA endorse this programme 48 Faculties from AIT & other Institutes

Ministry of Electronics and Information Technology (MEITY), Govt. of India has taken a unique initiative to conduct Development Joint Faculty Programmes during the winter of 2019 2020-January, 2020) (December, through the Electronics & ICT Academies established by MEITY at seven premier institutions. One such Academy is instituted at PDPM IIITDM Jabalpur, an institute of National Importance established by the IIIT Act of the Parliament of India.

Under the scheme, all the seven academies are conducting faculty development programmes (FDPs) in the emerging area of Python Programming and Industry Perspectives, Lectures are delivered by eminent experts from academia and industry through video conferencing mode. For lab exercises, tutorials support is provided by IITDM Jabalpur.

Army Institute of Technology, Pune is one of the nodal centre under IITDM Jabalpur, connected through NKN good broadband /leased line. The program is being conducted at the Department of Electronics and Telecommunications in its computer system lab. It was a five day (eight hours a day) course scheduled from 2<sup>nd</sup> Dec 2019 till 6<sup>th</sup> Dec 2019 in the department of Electronics and Telecommunications, Computer System lab. Dr. Shraddha oza, Dr Harjeet Kaur and Ms Manisha Nilkanth were coordinators for the workshop. Forty participants registered for the course out of which 32 faculty (including Mechanical, IT, Computer Electronics and Telecommunications) were from AIT and 8 were from SKN Sinhgad College of Engineering.



#### **Seminars**

# Seminar on Overview of Industrial IOT

A seminar on 'Overview of Industrial IOT' was conducted by the department on 19th July 2019. Ms. Sujata Tilak, MD of Ascent Intellimation Pvt. Ltd. Pune was invited for the seminar.



(Ms. Sujata Tilak is handling the session)

The session was very well received & there were many takeaways – from awareness about 'Gartner Services' to 'Careers in IOT'.

Dr. G R Patil Professor & Head of the Dept. & Dr. S D Oza, Ms. Snehal Marathe, Mrs. Rajashree Suryawanshi, Assistant Professors of the department coordinated the seminar. About 30 students from E&TC department attended the seminar.



# Guest Lecture on Sensors & Actuators:

On 23<sup>rd</sup> July 2019, Mr. Arvind Jangam from Nayan Electronics conducted a lecture on "Sensors and Actuators" for Se and TE E&Tc. Total 70 students attended the same.



# Seminar on IOT Tools & Technology

Mr. Abhijeet Devgirikar, Founder Copper Cloud Tech, Pvt. Ltd. Pune conducted a two hour session on "IOT tools and technologies" for SE, TE & BE E&Tc. The session was conducted on 30<sup>th</sup> July 2019 and was very well received. Total 80 students attended the session.



#### **Visits**

# Industrial Visit to MACFOS Pvt. Ltd.



(Mr. Jayesh Jain is conducting the session)

A team of faculty members and students from Robu.in Lab, visit the M/s Robu.in (MACFOS Pvt. Ltd.) company campus at Bhosari, Pune on 17th September 2019. The visit started with a long discussion with CEO Mr. Jayesh Jain. The students briefed him about the ongoing projects in Robu.in lab. The students further discussed the need to start a long-term project.

Mr. Jayesh Jain has proposed that three different applications based on the navigation prototype can be undertaken. He also gave a presentation about his company, its vision, mission, is product line and the way they function. He also gave in detail commercial aspect of a business and the way it runs. After the meeting he took the team around his company and gave details of each division.

# Alumni Corner

#### **Alumni Achievement**



Aditya Singh (2018 passout (E&TC) – Presently working with Microsoft) won Microsoft Hackthon 2019. (A way to bring peace of mind — and sleep — to parents whose children suffer seizures wins Microsoft Hackathon)

#### **Alumni Meet**



Mr Hargovind Adhikari 2001 Batch Alumni interacting with SE(E&TC) students on 21 Dec 2019



## ARMY INSTITUTE OF TECHNOLOGY

# DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

## Vision

To become center of excellence in the state-of-art areas such as Embedded, Robotics and IoT.

### Mission

M1.To provide state-of-art facility, modern infrastructure and learning environment to the students and faculty in the department to meet growing challenges of industry.

M2.To adapt best pedagogical methods for effective knowledge transfer.

M3.To collaborate with industry and institutes for knowledge creation and providing students with practical skills.

M4.To equip students with fundamental knowledge to enable them to carry out research and lifelong learning.