



PTU – IEEE STUDENT BRANCH

ANNUAL REPORT 2022

1. Formal Inauguration of PTU - IEEE Students Branch (Erstwhile PEC)

The Student Branch of IEEE was started in Puducherry Technological University (PTU) (erstwhile Pondicherry Engineering College) in 1995 by our beloved former Principal Dr.V. Prithviraj. Now due to the upgradation to university the formal Inauguration of IEEE PTU Students Branch was done on 20th April ,2022. Since then, it has developed into a multifaceted student club on campus, organizing a wide variety of technical events for the benefit of students. The Student Branch attempts to provide a platform for students from different branches and years to connect with each other and all IEEE members worldwide. Student members have the choice to get involved in technical projects, presentations, website building and maintenance and non-technical aspects such as marketing, volunteering for IEEE events and networking with other student branches. Other IEEE student branch activities are to facilitate PTU students to participate in national and international conferences, workshops, project/design competitions, industrial visits and access to IEEE online resources.





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2. Panel Discussion on the topic of “AI for Networks”. Wednesday, 20th April 2022 at 11am -2pm in the Auditorium, organized by IEEE STBPuducherry Technological University .

The panelist are Mr. Arumugam Velayoudame(Anchor and Panelist), Director Engineering, Qualcomm, Bangalore, Anchor for the discussion, and Industry Experts, Mr Suraj Venkatraman, Sr. Director, Global operations, M/s.Capgemini. Chennai, Mr.Nandakumar Nadarajane, Director, Capgemini, Chennai and Mr. Harishreyas Neelakantan, Sr. Lead Data Scientist, M/s. Tata Communications Ltd, Chennai.





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3. An invited talk by our ECE Alumnus of the 2000-2004 batch , Mr. Chandra Sekhar, Director - Engineering, CISCO, US is arranged for the 3rd year B.Tech (ECE) students in the Smart Class room of our Department on 11th April 2022 at 11 am. Our Honourable Vice Chancellor Prof. Dr. S. Mohan Vice Chancellor, PTU delivered the Presidential address.



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4. An invited talk on “Geoinformatics and Societal Applications – Opportunities & Challenges” was conducted by the IEEE PTU students chapter & Dept. of Electronics and Communication Engineering of Puducherry Technological University on 19.5.2022. The chief guest of the event is Dr. A. Senthil Kumar, President, ISPRS Technical Commission on Education and Outreach, Director, UN-affiliated Regional Centre: CSSTEAP and Former Director, Ind. Inst. Remote Sensing (ISRO Unit). Initially he had an interaction with the faculty members of ECE and EIE departments. During which he insisted on interdisciplinary collaborative research works. He also addressed the second year B.Tech(ECE) students and mentioned the research areas that the University can take up in the field of Geoinformatics. Honourable Vice-Chancellor Prof.S. Mohan of Puducherry Technological University presided over the function. Dr.Gnanou Florence Sudha, Head of the Dept, ECE welcomed the gathering. Dr. A.V.Ananthalakshmi, Assistant Professor, ECE Dept co-ordinated the function.





5. PTU IEEE SB Project Expo 2022

Project Expo 2022:

1. Design of a 32-bit processor based on RISC – V Architecture - <https://youtu.be/xzqjcZIF444>
2. Smart Pothole detection for Two-Wheelers during floods- <https://www.youtube.com/watch?v=FWK-UCE2Pvo>
3. Patient monitoring system using IoT - <https://www.youtube.com/watch?v=bhOEi9scY4s>
4. Handling Traffic Regulation using RFID and IoT - <https://www.youtube.com/watch?v=YK4YO6gt0Lg>
5. Smart Pothole detection for Two-Wheelers during floods - <https://youtu.be/BVGmOyhv9DY>
6. Assistive system for improving livelihood of visually impaired by using Li-Fi - <https://youtu.be/Fglw-rEyS7k>
7. Smart Security Surveillance System using IoT - <https://youtu.be/BVGmOyhv9DY>

The following teams compete for the Project expo 2022. The final demo cum presentation for the project expo was held on 04.03.2022. Each team was given a maximum of fifteen minutes for presentation and demonstration(Online) of their project.

Final Teams

Sl. No	Title of the Project	Students	Batch	Faculty Mentors
1.	Patient monitoring system using IoT	1. G. Dheepak	2018-2022	Dr. R. Sandanalakshmi
2.	Smart Security Surveillance System using IoT	1. A.S. Ashika Begam 2. S. Dharanidharan 3. P. Gowthamaan	2018-2022	Dr. A.V. Ananthalakshmi
3.	Smart Covid Surveillance	1. Ashish Kamalesh Singh 2. Manith Ruby Vazirani 3. Mahipal Singh K. Rajpurohit	2019-2023	Dr. K. Jayanthi
4.	Design of a 32-bit processor based on RISC – V Architecture	1. K. Navinkumar	2019-2023	Dr. M. Thachayani
5.	Forest fire Preventive Informer (IoT Based)	1. Medwin Mirza	2019-2023	Dr. S. Batmavady
6	Handling Traffic Regulation using RFID and IoT	1. K. Thanush Aravinde 2. R. Sriramachandran 3. K. Sivabharath	2020-2024	Dr. Gnanou Florence Sudha



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7.	Smart Pothole detection for Two-Wheelers during floods	1. T. C. Adityaa 2. Ra. Srinethe 3. N. Pranav	2020-2024	Dr. L. Nithyanandan
8	Assistive system for improving livelihood of visually impaired by using Li-Fi	1. Shiva Sai	2020-2024	Dr. S. Tamilselvan





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6.. Invited talk on Geoinformatics



Invited talk on Geoinformatics by Dr. A. Senthil Kumar, President, ISPRS Technical Commission on Education and Outreach (19.5.2022)

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7. IEEE - PTU SPECIAL GUEST LECTURE ON ACCOUNT OF IEEE DAY 2022 CELEBRATION:

**What Industry Wants from EEE and ECE Graduate Students?
and
Evolution of Mobile/Cellular Communication Technology from 1G to 5G**

Two Special Guest Lectures were organised on account of IEEE Day, on 25th September at 6:30pm(online) on the topics "What Industry wants from EEE and ECE Graduate Students ?" by Mr. Koti Reddy, Scientific Officer, Department of Atomic Energy and "Evolution of Cellular Communication Technology from 1G to 5G" by Mr. Sushil Kumar, Scientific Officer, Department of Atomic Energy.

Zoom meeting interface showing a presentation slide titled "Welcome" and "What Industry Wants from EEE and ECE Graduate Students? and Evolution of Mobile/Cellular Communication Technology from 1G to 5G". The slide lists two speakers: B. Koti Reddy, Scientific Officer(EEE), Dept of Atomic Energy, Govt of India, Heavy Water Plant(Manuguru), and Sushil Kumar, Scientific Officer(ECE), Dept of Atomic Energy, Govt of India, Heavy Water Plant(Manuguru). The date is Sep 25, 2022. The Zoom interface shows participants in a grid on the right and meeting controls at the bottom.