



Celebrating 50 Years of Excellence

January 2023 Newsletter

Symbiosis Institute of Technology, Pune

Electronics and Telecommunication Engineering Department

Department Vision:

To emerge as a leading source for Electronics and Telecommunication engineering, fostering globally proficient engineers to meet the demands of evolving industry and society.

Department Mission:

- **M1:** Foster collaboration with industry to facilitate the acquisition of cutting-edge technologies and contribute to the generation of up-to-date knowledge, enhancing employability and sustainability.
- **M2:** Encourage innovation, research, and development, creating an environment conducive to higher education, entrepreneurship, and lifelong learning.
- **M3:** Cultivate leadership qualities infused with social and ethical values, providing a platform for their development.

Program Educational Objectives (PEOs):

- **PEO1:** Graduates will possess a strong foundation in science and engineering fundamentals, along with analytical skills to effectively solve real-world problems.
- **PEO2:** Graduates will gain technical proficiency in Electronics and Telecommunication fields and scale new heights in profession through lifelong learning.
- **PEO3:** Graduates will embrace professionalism, ethical conduct at all levels and constantly evolve in a multidisciplinary approach leading towards sustainability.
- **PEO4:** Graduates will leverage their engineering knowledge, effective communication skills, leadership qualities, and teamwork spirit to serve society and contribute positively to their community.

Guest lectures organized:



Enlightening session by Prof. **Dr. Sarat Patra**,
Director Indian Institute of Information Technology,
Vadodara & IIIT Vadodara-International Campus, Diu.

SYMBIOSIS INSTITUTE OF TECHNOLOGY

Alumni Lecture Series
Department of Electronics and Telecommunication

TOPIC : E&TC to Software Engineering

Seepja Payasi
Batch 2018-22,
Presently working with
Persistent Systems

19th NOV, 2022
10.00 am- 11.00 pm, IST

alumni session on "From E&TC to Software Engineering" by our very own alumni **Seepja P.** who is now working with Persistent Systems as a software Engineer.



hands on workshop on Embedded Systems with
STM 32 ARM Cortex M4 Microcontroller by **Mr. Shridhar Dudam**



Dr. Sudhir Aghashe who is a seasoned academician, researcher discussed the Virtual lab project and ways to increase Industry consultancy.

- The guest speaker **Dr Hrushikesh Dhande**, Academic Relationship Manager, TCS, Pune has delivered a comprehensive lecture on "*Opportunities & Initiatives at TCS*" 1st September 2022 for the benefit of B. Tech students.
- The guest speaker **Mr. Parvez Patel**, CEO, Ezee motor corp, Pune has delivered a comprehensive lecture on "*EV batteries*" on 8th August 2022 for the benefit of B. Tech students.
- The guest speaker **Mr. Kunal Kalbene**, Director, Cojag Technology Pvt. Ltd., Nagpur, India has delivered a comprehensive lecture on "*Workshop on Arduino with real time applications*" on 20th September 2022 for the benefit of B. Tech and M. Tech students.

Department publications:

- Jani, Hardik K., **MVV Prasad Kantipudi**, Garlapati Nagababu, Dhruvil Prajapati, and Surendra Singh Kachhwaha. "Simultaneity of wind and solar energy: A Spatio-temporal analysis to delineate the plausible regions to harness." Sustainable Energy Technologies and Assessments, vol. 53, pp. 102665, 2022.
- Velamuri, Suresh, **MVV Prasad Kantipudi**, R. Sitharthan, Dharmaraj Kanakadhurga, Natarajan Prabakaran, and A. Rajkumar. "A Q-learning based electric vehicle scheduling technique in a distribution system for power loss curtailment." Sustainable Computing: Informatics and Systems, vol. 36, pp. 100798, 2022.
- **MVV Prasad Kantipudi**, and Satish Kumar. "A computationally efficient learning model to classify audio signal attributes." International Journal of Electrical & Computer Engineering, vol. 12, pp. 2088-8708, 2022.
- Kumar, Sandeep, Sukhwinder Singh, Jagdish Kumar, and **MVV Prasad Kantipudi**. "Age and gender classification using Seg-Net based architecture and machine learning." Multimedia Tools and Applications, vol. 81, pp. 42285-42308, 2022.
- **MVV Prasad Kantipudi**, Rajanikanth Aluvalu, and Suresh Velamuri. "An Intelligent Approach of Intrusion Detection in Mobile Crowd Sourcing Systems in the Context of IoT-Based SMART City." Smart Science, vol. 11, pp. 1-7, 2022.
- Akella, Suresh, and **MVV Prasad Kantipudi**. "Overcoming Covid19 Effect to Implement NAAC: Mind Mapping." Journal of Engineering Education Transformations, vol. 36, pp. 21-30, 2022.
- S Pandit, Alok Kumar, **Prabhat Thakur** and G Singh, "SEE-MAC: Spectrum and energy efficient-medium access control protocol for internet of things" International Journal of Communication Systems, vol. 35, no. 15, pp. 1-28, Jul. 2022.
- B F Maphathe, **Prabhat Thakur**, G Singh and H E Iddi, "The Terahertz channel modeling in internet of multimedia design in-body antenna," International Journal of E-Health and Medical Communications, vol. 13, no. 4, Aug. 2022.
- P Mishra, **Prabhat Thakur** and G Singh, "Sustainable smart city to society 5.0: State-of-the-art and research challenges", SAIEE Africa Research Journal, vol.113, no. 4, pp. 152-164, Dec. 2022.
- B Bhavesh and **Prabhat Thakur**, "Integration of artificial intelligence in robotic vehicle: A bibliometric analysis" Journal of Behavioral Robotics, vol. 13, no. 1, pp. 110-120, Nov. 2022.
- A. A. John, **Prabhat Thakur** and G Singh, "Potential, concepts, and key advances for a ubiquitous adaptive indigenous micro and nano engineering in 6G network", International Journal of Communication Systems, Dec. 2022.
- **Aditya Jain**, Y.G. Wang, L.N. Shi, Recent developments in BaTiO₃ based lead-free Microelectronics Devices for energy storage applications, J. Alloys Compd., 928 (2022) 167066.
- **Aditya Jain**, A. Kumar, N. Gupta, Y.G. Wang, Emergence of magnetic and magnetoelectric characteristics of advanced electrostatic capacitors used in portable electronic , J. Alloys Compd., 930 (2023) 167298.
- Z.H. Ren, Y.G. Wang, **Aditya Jain**, J.X. Hu, L.N. Shi, H.Z. Zhou, F.G. Chen, Remarkable visible-light activated photostriction in advanced capacitors used in VLSI Industries, Ceram. Int., 48 (2022) 35176-35184.
- Jadhav, R.Y., **Mahajan, A**, "Data compression and noise reduction in smart grid using discrete wavelet transform", Traitement du Signal, Vol. 39, No. 5, pp. 1857-1863, Nov 2022
- Napte, K., **Mahajan , A**, "Deep learning based liver segmentation: A review", Revue d'Intelligence Artificielle, Vol. 36, No. 6, pp. 979-984, Dec 2022.
- R. R. Patil and **S. Kumar**, "Rice Transformer: A Novel Integrated Management System for Controlling Rice Diseases," IEEE Access, vol. 10, pp. 87698-87714, 2022.
- Dixit, A.S., **Kumar, S.**, "Performance enhancement of antipodal Vivaldi antenna array using metamaterial for 38 GHz band of 5G applications," Optical Materials (2022). Volume 133, November 2022, 112811
- A. S. Dixit, **S. Kumar** and S. Urooj, "A constant gain and miniaturized antipodal vivaldi antenna for 5g communication applications," Computers, Materials & Continua, vol. 73, no.3, pp. 4909–4921, 2022.
- Kumar, A.; **Kumar, S.**; Elkamchouchi, D.H.; Urooj, S. "Fully Differential Current-Mode Configuration for the Realization of First-Order Filters with Ease of Cascadability," Electronics 2022, 11, 2072
- **S. Kumar** and A. S. Dixit, "Design of a high-gain dual-band antipodal Vivaldi antenna array for 5G communications," International Journal of Microwave and Wireless Technologies, vol. 14, no. 9, pp. 1159–1167, 2022.

Student achievements:

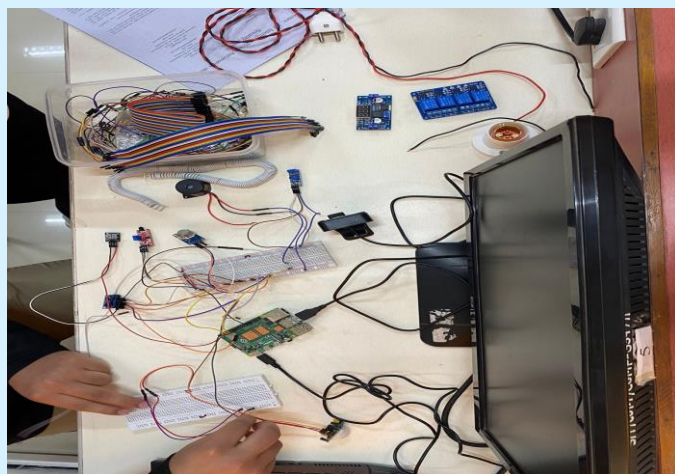
- Soham Hudnurkar and Abhimanyu Patwa for successfully completing their Mitacs Globalink internships from Canada
- Alumni Niharika Saxena for embarking a new journey to IIM Ahmedabad for MBA-PGPX.



Value added course:

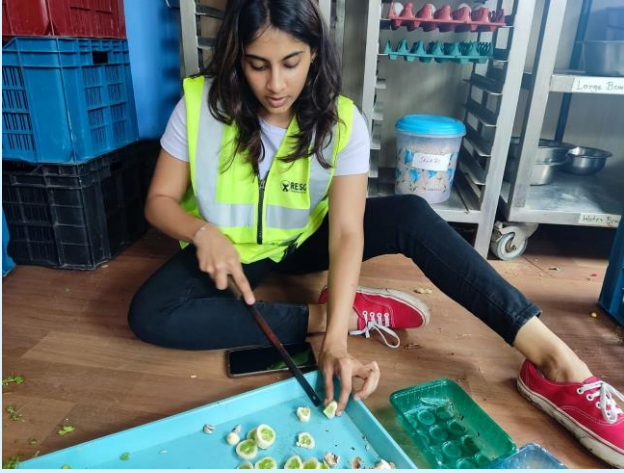
- A value added course on **“Simulation Analysis and Design of CMOS Integrated Circuits by using Cadence tool”** has been introduced for the benefit of B. tech students. The objective of this course is to give insights of front-end design features from Cadence and the powerful PSpice Simulator package. The course consists of 40 hours of theory and practical sessions. The coordinators for the event were Dr. Durgesh Nandan and Dr. Mohammad Faseehuddin.

Project based learning in E&TC Department:



Service Learning by E&TC students:

Kudos to our Third year E&TC students who are doing projects of varied domains in service learning right from building shelters for animals, to developing blockchain and 3D models for organ donation NGO and on-field survey & analysis of dengue malaria spread in villages of Mulshi (govt project).

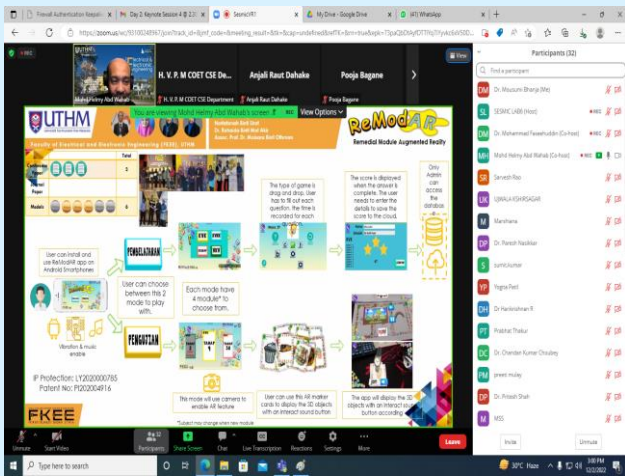


Symbitech 2022: Technical Fest



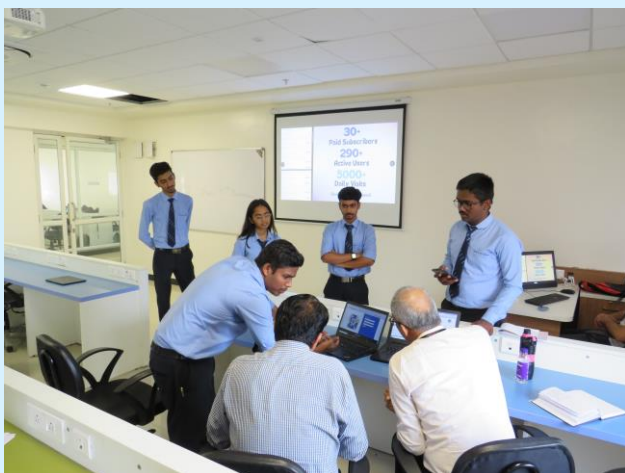
SESMIC 2022:

An international conference on recent and future Trends in Smart Electronics System and Manufacturing and its applications has organized with the support of the Department of Science and Industrial Research (DSIR), New Delhi by the Electronics & Telecommunication Department, Symbiosis Institute of Technology (SIT). This conference was in collaboration with Universiti Kebangsaan Malaysia (UKM), Malaysia.



SESMIC Hackathon

During the SESMIC conference, Hackathon was also organized. The theme of the hackathon revolved around advances in the area of smart agriculture, smart healthcare, smart education, and smart society and has brought together researchers, engineers, industry professionals and practitioners.



Placement details:

Students of 2019-23 batch have been placed in renowned companies, such as Phoenix, Deloitte, IBM Software Labs, Cognizant, StoneX Technology Services Pvt Ltd, GE Appliances, HDFC Bank, Intellipat, Kohler India, Verolt Engineering, Forty Two Labs, etc.

Students corner

I am appreciative of all the chances that SIT provided. In particular, the 6-month internship semester and the Diploma in Business Management from SIBM both helped me to expand my horizons and get a glimpse of the professional world. This place is vibrant and exciting. The university is what it is now because of its instructors. My confidence to advance in my work has been boosted by the instructors' excellent teaching strategies and practical knowledge. All of my fundamentals and logic are now crystal obvious thanks to the opportunity to ask questions at any time during the day. To remember all the memories I made on that wonderful intellectual journey, I wish I could go back to my SIT ENTC glory years.

Siddharth Sameer, E&TC, 2018-22 Batch

Tidbits

- There are no shortcuts to any place worth going.

Beverly Sills, opera singer

- Start where you are. Use what you have. Do what you can.

Arthur Ashe, tennis star

- The difference between a stumbling block and a stepping stone is how high you raise your foot.

Benny Lewis, author

- Try never to be the smartest person in the room. And if you are, I suggest you invite smarter people, or find a different room.

Michael Dell, entrepreneur

- You can only become truly accomplished at something you love.

Maya Angelou, author

- Don't say you don't have enough time. You have exactly the same number of hours per day that were given to Helen Keller, Pasteur, Michelangelo, Mother Teresa, Leonardo da Vinci, Thomas Jefferson and Albert Einstein.

H. Jackson Brown Jr., author