



VISION

Create an environment to develop professional, scientific, and innovation skills in Electrical and Electronics Engineering to meet global demands and societal needs.

MISSION

- To understand the fundamental concepts through laboratory or field techniques of Electrical and Electronics Engineering.
- To prepare students for employment in multi-disciplinary areas.
- To enable students to pursue advanced degrees in multi-disciplinary programs or related professional schools.

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EDITORIAL BOARD

HOD, EECE

Dr. Pankaj Kandhway

Mrs. Padmaja B. (M. Tech)

RESEARCH

1. Godfrey, D., Nirmal, D., Arivazhagan, L., Kannan, R. R., Nelson, P. I., Rajesh, S., ... & Mohankumar, N. (2020). A novel ZnPc nanorod derived piezoelectric nanogenerator for energy harvesting. *Physica E: Low-dimensional Systems and Nanostructures*, 118, 113931.
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3. Godfrey, D., Nirmal, D., Godwinraj, D., Arivazhagan, L., MohanKumar, N., Tzou, J., & Yeh, W. K. (2021). Enhancement of DC and breakdown performance on single to multi-step gate FP using GaN-HEMT for high power applications. *Silicon*, 13, 1177-1183.
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10. Preethi, S., Venkatesh, M., Pandian, M., & Lakshmi Priya, G. L. (2021). *Analytical modeling and simulation of gate-all-around Junctionless Mosfet for biosensing applications*. *Silicon* 13: 3755-3764.
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13. Godfrey, D., Nirmal, D., Arivazhagan, L., Godwinraj, D., Kumar, N. M., Chen, Y., & Yeh, W. (2021). Current collapse degradation in GaN High Electron Mobility Transistor by virtual gate. *Microelectronics Journal*, 118, 105293.
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15. Telagam, N., Somanaidu, U., Kumar, M. A., Sabarimuthu, M., & Kandasamy, N. (2021). IoT based secure lock/unlock system using Google Assistant based English and French languages. *ijOE*, 17(10), 35.

ARTICLE

Sridhara, S. B., Ramesha, M., & Patil, V. (2020). Adaptive scheduling design for time slotted channel hopping enabled mobile adhoc network. *International Journal of Advanced Computer Science and Applications*, 11(3).

Abstract—Industrial Internet of things (IIOT) applications comprises the wearable sensor devices for human activity monitoring; these devices generate the continuous data at higher data rate and it is powered through the battery. Hence, it restricts the uses of wireless protocol such as IEEE 802.15.4 and BLE (Bluetooth Low Energy). Moreover, there are promising technologies such as TSCH (Time Slotted Channel Hopping) MAC (Medium Access Control) which can be deployed in the different environment, which are prone to interference. In this research work we focus on overcoming the

issue for designing the AS (Adaptive Scheduling) for TSCH – MANET (Mobile Adhoc Network); furthermore it is very difficult to design scheduling technique considering the unpredictable nature of data source location and wireless link, this results in waste of reserve resource. Moreover proposed Adaptive Scheduling model allows the both slots i.e. shared and dedicated slots, it also allows the communicating device to active the assigned slots adaptively. Hence, our proposed AS model achieves the higher overall access fairness, minimal idle listening overhead, higher packet deliver rate; further to cope up with the higher traffic load MANET device can activate the additional slots dynamically. Moreover, the outcome of Adaptive Scheduling model shows the higher data transmission and lower energy consumption.

ACHIEVEMENTS & ACTIVITIES



➤ The Venture Development Centre at GITAM University, Bengaluru, successfully organized E-Club Bangalore and hosted an internal hackathon for the national event (Smart India Hackathon) on 21-03-2022. A total of 9 teams participated in the event. The teams were requested to set up their presentations an hour before the program. The hackathon started at 11 am in the Shivaji Bhavan Lobby. There were 2 judges (Prof Sita Devulapalli and Dr Sankalp). All teams gave their best to win the competition. Many students and faculty also came to explore the presentations. The participants were excited by the number of students and faculty showing up, which helped them perform even better. At the end of the day, everyone enjoyed the event with fun, gaining knowledge on problems and solving them.

➤ The faculty of the School of Business, Bengaluru, organised an entrepreneurship workshop on “Venture Meet” for twenty student teams to pitch their ideas on 1st April 2022.

➤ On 5th October 2020(Monday), the portfolio “Chai Chats” of E-Club organized a talk show with Dr. A. Subrahmanyam, Dean of Sciences at GITAM University, Visakhapatnam, as the guest speaker. He is the founding director of M/s Thin Film Solutions-Consultants and Project Executors, which IIT Madras incubated in Chennai in December 2003. He is also the founding director of M/s Surf ScienTek Pvt. Ltd. started in February 2016 in Bangalore. The innovative and delightful talk show started at 5:00 pm. The speaker was posed with various questions about GITAM, the current COVID-19 pandemic situation, and other related topics.

➤ Team GStudio conducted the Seminar on Basics Of Photography on 2nd Feb 2021 at 11 am. It was conducted using Zoom as a platform and lasted for 40 minutes with 51 participants from all three campuses of GITAM (Vizag, Hyderabad, Bangalore). The main agenda of conducting the seminar was to educate fellow students about the Basics of Photography. The Seminar was hosted by Mohith Reddy, a member of GStudio, who spoke about the technical aspects and basics of photography and explained each one of them.

➤ NCC and NSS teams, in association with Physical Education and Yoga, organized the Republic Day Celebrations on 26.01.2022.

➤ 67 NCC cadets appeared for the NCC camp to obtain eligibility certificates from 1st February to 4th February 2022.





- Dr C. Mylara Reddy and Sri Parikshith Nayaka, School of Technology, Bengaluru, conducted a workshop for Engineering students on the “CODEX - Hackathon Coding competition” on 29th March 2022.
- The NCC cadets observed Martyrs’ Day on 23rd March 2022 in memory of freedom fighters Bhagat Singh, Rajguru and Sukhdev and showered their tributes with ShokShastr.
- In collaboration with Lions Blood Bank, the NSS and NCC units conducted a Mega Blood Donation camp on 24th March 2022 and collected 570 blood donated by the students of GITAM.
- Kalakrithi is the Cultural Club of GITAM University, this student club has functions in the Bangalore campus to entertain and enrich the understanding of various different cultures and practices. The Kalakrithi team held the Kalakrithi preface event on the 4th of February 2021; this event was held to give a brief introduction about Kalakrithi, which was held on-campus by following the University’s COVID-19 protocol. Many students came forward with their stunning performances at the event and entertained the audience.
- Speaking Club of GITAM Bangalore, in collaboration with GITAM Quiz Club, has conducted an online quiz named Sultans of Speech on 21/01/21 from 09:00 AM to 05:00 PM. The quiz was conducted online, Kahoot!, for all three campuses.
- An event was conducted on the topic of “VOTE FOR THE RIGHT PEOPLE” with the help of GITAM Institute of Management Unit 7 students on 19th February 2021. The event aimed to propagate the importance of voting by taking the oath. The event was organised with the help of the current admitted batch of students. A total of 35 students participated in the event and swore they would cast their vote and elect the right candidate for development and growth. In this event NSS Programme Coordinator GITAM University and NSS Programme officers from other units also participated.

MESSAGES

Dear Readers,



It gives me immense pleasure to be a part of the Department of EECE at GITAM (Deemed to be University). Since joining on 16th December 2021, I have experienced firsthand the vibrant academic atmosphere and the department’s commitment to excellence in education and research. The EECE Department is renowned for its innovative curriculum, state-of-the-art laboratories, and dynamic team of faculty members who are dedicated to shaping students into future-ready professionals. GITAM as an institution, stands out for its holistic approach to education, fostering academic rigour and an inclusive and collaborative environment. With its well-established infrastructure and a forward-thinking vision, GITAM provides the ideal platform for students and faculty to excel in their respective domains. I look forward to contributing to the growth and success of the EECE Department and supporting GITAM’s mission of transforming lives through quality education and impactful research.

Dr. Pankaj Kandhway, Assist. Professor



I am delighted to join the Department of EECE at GITAM (Deemed to be University) as an Assistant Professor joined on 3rd January 2022. It is an honour to be a part of this vibrant academic community, which has consistently demonstrated excellence in fostering innovation, research, and learning in engineering and technology. GITAM's emphasis on holistic education and interdisciplinary collaboration aligns perfectly with my academic and research philosophy. The EECE Department at GITAM stands out for its dynamic curriculum, highly motivated students, and a culture of research excellence. The department provides an excellent platform for students and faculty to engage in transformative learning experiences and cutting-edge research. I look forward to collaborating with my esteemed colleagues and exploring opportunities to advance knowledge in Optical Communication, Image Processing, and Communication Systems.

Dr Rohan Prasad, Assist. Professor



It is a great privilege to join the EECE Department at GITAM (Deemed to be University) as an Assistant Professor joined on 3rd January 2022. GITAM is a vibrant institution renowned for its academic excellence, research culture, and commitment to nurturing future-ready professionals. The EECE Department, in particular, stands out for its interdisciplinary approach and emphasis on bridging traditional domains with emerging technologies. GITAM's robust research environment and supportive academic ecosystem present a fantastic platform to advance these areas and contribute to the evolving technological landscape. I look forward to contributing to the department's academic and research endeavours while collaborating with colleagues and students to address pressing challenges in technology and society. Together, we aim to uphold and enhance GITAM's legacy of excellence.

Dr. Sourav Bhowmick, Assist. Professor

Message from the Editorial Board

With great excitement, we present the inaugural issue of our department's newsletter, [DEPT. OF EECE] (Vol. 1, Issue 1). This marks a significant milestone for our department, as we launch this platform to foster communication, collaboration, and community engagement. Our aim is to create a vibrant space that celebrates the achievements of our faculty, students, and staff, highlights important updates, and shares insights that inspire and inform. Each issue will offer a blend of news, success stories, upcoming events, and thoughtful commentary on topics relevant to our shared mission and vision. The journey of curating this first issue has been nothing short of inspiring, and we extend our heartfelt gratitude to everyone who contributed to making this dream a reality. This newsletter is not just a publication; it reflects our collective efforts and the dynamism that defines our department. We hope you enjoy this first issue and await your feedback, ideas, and contributions as we grow. Let this newsletter be the beginning of a tradition that keeps us connected and engaged.

Happy reading, and welcome to the start of something special!