Volume 4 | Issue 2 Jan - June 2022



# BITS AND BYTES

### **Biannual Newsletter**

Department of Electronics and Communication Engineering, MIT, MAHE

September, 2022

### Message from the department chair



Dr. G. Subramanya Nayak All the best.

Over the past few months, our faculty and staff have worked tirelessly to provide an excellent educational experience for our students. During the year, the department UG program received accreditation from NBA, the curriculum was revised and new concepts of self-directed learning components were added. Our ECE community continues to move forward together with a passion towards teaching, learning and research.

# **Department Activities**

#### IEEE Outstanding Medium Student Branch Award



IEEE Student Branch Manipal (SBM) had bagged Outstanding Medium Student Branch Award 2021 from R10 - IEEE Bangalore section. The award was presented to Dr. Pallavi R Mane, Branch Counselor - IEEE SBM, Manipal in IEEE Bangalore Section Award Ceremony - on 20th March 2022, by Shree B. S. Bindhumadhava, Senior Director, at Centre for Development of Advanced Computing (C-DAC), Ministry of electronics and information Technology (Meity), Govt. of India, past Chair IEEE Bangalore section.

#### **Distinguished Lecture**

The IEEE ComSoc MIT Student Chapter of IEEE SBM Manipal hosted a distinguished lecture on Multi-channel Non-Stationary Signal Analysis and Applications presented by **Dr. Ram Bilas Pachori,** a Professor of the department of Electrical Engineering in IIT, Indore on the 21st of March in online mode.

#### **Technical Publications**

Faculty members and students of the department have published **32 journal papers** in various reputed Scopus indexed and web of science journals during January and June 2022. Also, there are **11 conference paper** presentations and publications by the department faculty and students in this period.

#### **AICECS Conference**

The AICECS conference organised in October 2021 has been published and its proceedings are now available online at the link given below:

https://iopscience.iop.org/issue/1742-6596/2161/1
The volume number allocated for the conference is 2161.

#### **Fare Thee Well**



**Professor Stanley O Maben**, Associate Professor-senior, retired on 1st June 2022 after serving the department for more than 30 years.

#### **New Faculty**

**Dr. Bhaskar Awaidhyia** has joined the department in June 2022. He has received his Ph.D from IIIT-DMJ, Jabalpur, for the thesis entitled "Performance Analysis of Non-Hysteretic Negative Capacitance Field Effect Transistor". His areas of specialization include Micro and Nano electronics, and VLSI.

#### **Felicitation**



**Dr D V Kamath**, Professor has been appointed as Head of the Department of Mechatronics, MIT from 01st June 2022. Professor has served more than 25 years in the department and has many technical publications and is also guiding PhD students.

#### **Alumni Interaction Series**

**Durgesh Nandini Satpathy** (batch of 2020) and **Sahas Gembali** (batch of 2018), alumnl of the department of ECE were invited to an online interaction on the 12th of March. Currently, Ms. Nandini is a Masters student at Technical University of Munich, Germany. Mr. Sahas Is currently a graduate student of the Integrated Design & Management program at MIT, USA. He works on user research & synthesis at the product level, concept development and design for manufacturing. Their invaluable insights helped guide the attendees in their career paths and cleared all their queries.

#### **Alumni Interaction Series**



ECE Alumni (1996), **Dr. Himanshu Tagra**, who is currently the Vice President of HCL Technologies, visited the campus on the 29th of April.

The department then organised an interactive session with him on the 28th May 2022. In this session, Dr. Himanshu shared his experience on his journey through the corporate world.



**Mr. Utkarsh Sinha** (batch of 2015), an alumnus of the department of ECE is currently the Director of Engineering and Management at Bucolic Kailash Agritech and FMCG Pt Ltd. He was invited for a talk in the alumni series on the 21st of April. The talk revolved around his entrepreneurial journey and it proved insightful to budding entrepreneurs to start off their journey.

# **Faculty Achievements**

#### **PhD Supervision**

**Dr. Aparna U** was recognised as PhD Supervisor of MAHE in Plasmonics, Photonic crystals and Optical Communications on the 19th of April.

**Dr. Shailendra Kumar Tiwari** was recognised as PhD Co-Supervisor of MAHE in Micro Electro Mechanical System (MEMS), Microfluids, Paper micro fluids, microheater and Polymerase chain reaction (PCR) on the 12th of January.

**Dr. Sampath Kumar** as a resource person has given a talk on "3D printing of human anatomical models applied to BCI - Al" during the Faculty Development Program on "Applications of Artificial Intelligence in Brain-Computer Interface" on 09/05/2022 organised by SR University, Telangana.

A book chapter abstract of his, entitled "Brain computer Interface and 3D printed bionic hand" selected for inclusion in a book "Human-Machine Interface Technology Advancements and Applications" CRC Press edited book.

#### **Awards and Accolades**



**Prof. M. Sathish Kumar** inaugurated the undergraduate project exhibition EXPRO 2022 at NMAMIT Nitte on 31st May, 2022. He was also the judge for ten of the undergraduate projects on display for EXPRO 2022



**Dr. Anitha H** was felicitated by MAHE on National Technology Day, 2022 for receiving two funded projects worth INR 45,00,000 by DST Government of India.

The **Staff Team** from MIT, has won the **second prize** in 'Variety Entertainment' competition of UTSAV 2022.

#### MAHE 'PhD Conclave-2022' Best Presentation awardee

**Prashanth Barla** got the Best Presentation award in PhD conclave 2022 in MAHE Manipal on 27 and 28 May 2022.

#### **Sports Activities**



**Prof. M. Sathish Kumar** participated in the 10K run in FIT-A-THON 2022 organized by MAHE on Mother's day, 8th of May, 2022



The eagerly anticipated **"Lagaan 2022**" cricket tournament was organized by the MIT faculty club, and faculty members took an active part in the tournament and the women's day celebration that followed.

## **Alumni Achievements**

#### **Professional Progress**

**Ms. Reema Malhotra** an alumnus of MIT(1992, E&C) has assumed responsibility as Sr. Vice President People S&P Global Inc. is an American publicly traded corporation at its Indian operations. https://www.linkedin.com/in/reema-malhotra-29752b11/

### **Student Achievements**



**Ishita**, a second year student, and her team won **second runner-up** in the inter-institute round of **Smart India Hackathon'22**. The team also qualified as national finalists.

Team AMIGO (**Arko Chattopadhyay** (2022, Mechatronics), **Enrique Ferrao** (2022, Mechatronics), **Pranav Reddy** (2022, E&E), **Priyanshu Gupta** (2023, E&C)) representing Manipal Institute of Technology has been declared winner at the Regional Summit of Hult Prize Foundation.

After winning the OnCampus Program, team Amigo went on to participate in the South Asia level Regional Summit conducted on 6th and 7th May, where we were declared winners.

Team Amigo will now be a part of the Global Accelerator Program which will be a six weeklong program at Hult International School of Business, Boston.

Winners of this competition will receive a prize money of US \$1,000,000 and will be pitching the startup to Bill Clinton.





**Ajay Kumar Sahu** received his M.Tech. degree in Microelectronics from MIT, Manipal. His research interests include digital logic design, processor architecture, and ASIC design. He has published one journal paper in **IEEE Access (Q1, Scopus + WoS indexed)** and one conference paper in **American Institute of Physics: Conference Proceedings** (Q4, Scopus indexed). He also received "**2nd Runner up award, PG - ISSS Awards 2021**" for his work on "ASIC RTL Design of MAC Engine for 2-D Image Convolution" . He did his work under the supervision of Dr. G Subramanya Nayak, Professor, ECE department.

**Gagan Goankar**, a second year student has secured **first** place in the competition '**Eastern Vocal** (**Solo**)' at UTSAV 2022 which was held on the 2nd of April in KMC Greens.



He also won the 2nd Runner up as a team in Zee Kannada SaReGaMaPa Championship which was a competition held between winners and finalists of previous seasons of the prestigious singing show.



Harshil Bhatt, a student of third year, has been selected for the Nokia Bell Labs Project.

The team, CodeforSupport, comprising of, **Shriti Chandra** (3rd year, ECE), **Rhea Adhikari** (3rd year, CSE), and **Ishika Gupta** (3rd year, MIT, ECE) have secured the **second position nationally** at the **Google Girl Hackathon** conducted by Google India. They were awarded a prize money of 500 USD along with PPO Interview Offers with Google and Swag Rewards.





**Sukrita Panigrahi** was awarded the **Kadambi Scholarship** for the year 2021-2022 on April 30, 2022

# **Club Activities**

### IE-E&C

- Career Talk was organised on the 13th of February in the online mode consisting of 10 speakers from various backgrounds. The talk educated the attendees on placements, future career prospects and guidance.
- **TechWeek** was conducted from 28th April to 2nd May consisting of 4 events: Quizardry (Trivia Event), Electrovention (Electronics workshop followed by event on ESP8266), Integrathon (Math Event) and Codingaro (Coding Hackathon in Collaboration with Coding Ninjas). There was huge participation and cash prizes were awarded to winners.

### ISTE

- **Aurora**, the TechWeek of ISTE was organized from the 4th to 7th of March consisting of two events: Crown Jewel (Coding event), Unlockathon (Trivia event) and two webinars with predominant speakers, Khushhal Kaushik for a discussion on Internet Security and Sunil Varkey for his talk on Cybersecurity in the Corporate World.
- **ScripTech** A Technical writing competition was organized in the month of January, 2022.

#### **Principal Editors**

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Dr. Ananthakrishna T

#### **Editor-In-Chief**

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#### **Editorial Team**

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