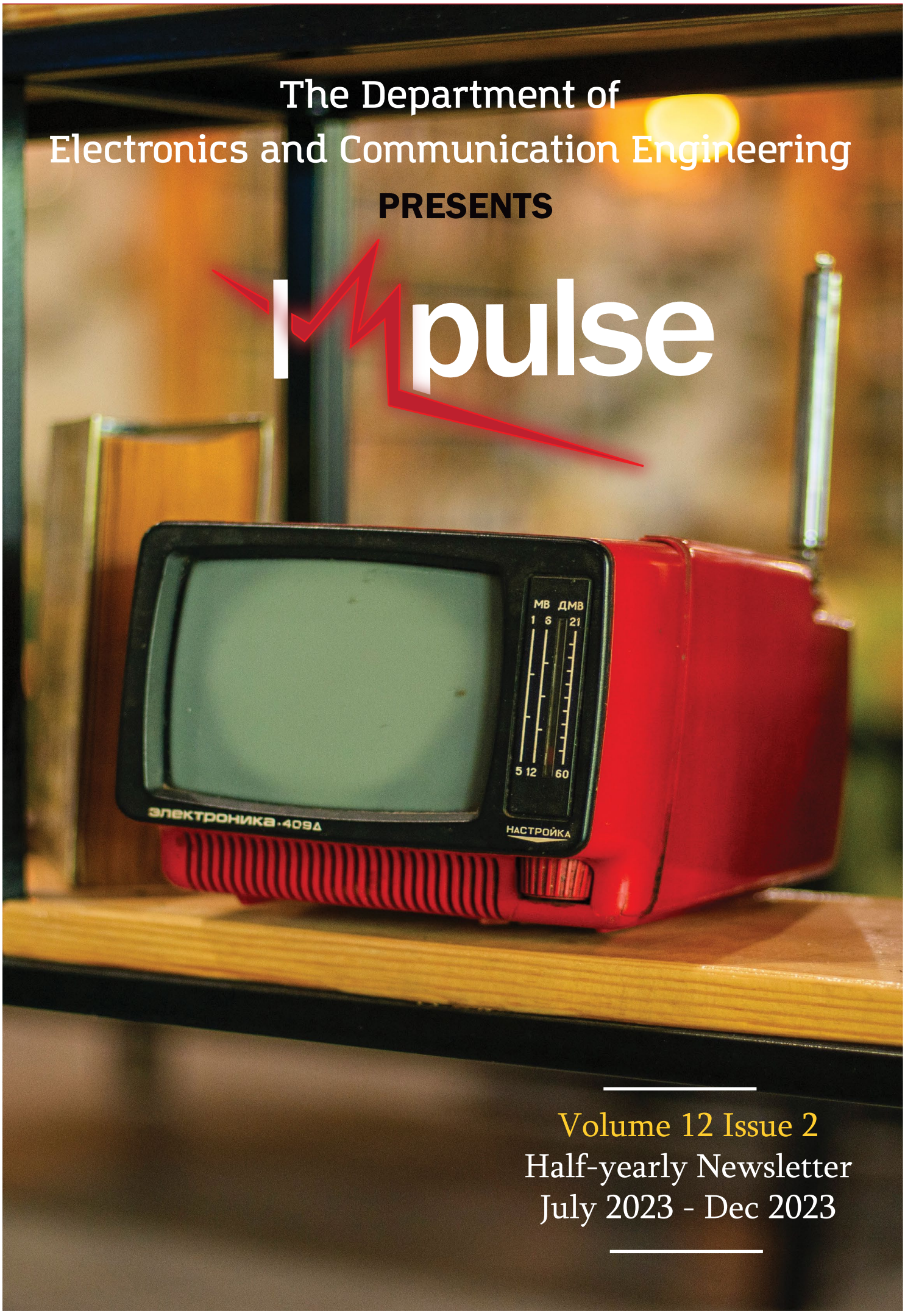
The Department of
Electronics and Communication Engineering

PRESENTS

Impulse



Volume 12 Issue 2
Half-yearly Newsletter
July 2023 - Dec 2023

EDITOR'S NOTE

Greetings, esteemed readers!
It is with immense pleasure that we present to you the latest edition of our department newsletter, a vibrant tapestry woven with the threads of academic achievement, student life, and the collective spirit that defines our department.

In these pages, the readers will find stories that encapsulate the essence of our college experience. From groundbreaking research to creative endeavors, our students continue to shine, leaving an indelible mark on our institution. Beyond the classroom, our students' pursuits extend to diverse extracurricular activities, underscoring the holistic development we champion.

We are excited as we present the exceptional works of our faculty, the backbone of our academic journey. They showcase their dedication to teaching and research. They have an invaluable role in the students' lives as they help shape the minds of students and thereby help them in their journey towards excellence. Their tireless efforts to create meaningful learning experiences echo in the halls of our campus, contributing to the rich tapestry of our academic community.

We also extend our appreciation to the readers for your continued support and engagement, which inspire us to maintain the highest standards of journalistic integrity. Hope you enjoy reading Impulse as much as we did creating!

Anusharaj S, IV year, ECE-A
Shrinidhi Seenivasan, IV year, ECE-A
Nivetha Elango, IV year, ECE-B
Shanmukhapriya C, IV year, ECE-B
Sriya Pavani V, III year, ECE-B
S J Varshaa, III year, ECE-B

MEET THE TEAM

FACULTY CO-ORDINATOR :

1. Dr. P. Vijayalakshmi
   Prof. & HOD, ECE

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6. Indhra, II year, ECE-A
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8. Justin Benito B, II year, ECE-A
9. Karthayani T S, II year, ECE-A
10. Lashika N B, II year, ECE-A
11. Rupadharshini R, II year, ECE-B
12. Shruti Chandrasekar, II year, ECE-B
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14. Sowmika D, II year, ECE-B

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13. Rupadharshini R, II year, ECE-B
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2. Blessing Benzer, VLSI
3. Prasanna D, AE
4. Saranya S, VLSI
5. Swetha K, CS
6. Swetha K, VLSI

CONTENTS

VISITS AND INTERACTIONS

- Dr. N. Prabagarane, ASP/ECE visited King Mongkut's University of Technology North Bangkok, Thailand as a short-term visitor to the Beyond 5G Wireless Innovation Center upon invited by the Prof. Vitawat Sittakul from 04.07.2023 to 10.07.2023.
- Dr. S. Hanis, ASP/ECE was a judge for the Project Expo held at Prince Shri Venkateshwara Padmavathy Engineering College on 25.07.2023.
- Dr. P. Kaythry, ASP/ECE received the "Madrasin Maanikangal" award from the Environmentalist Foundation of India on 22.08.2023, on the occasion of Madras Day celebration
- Dr. R. Kishore, ASP/ECE is recognized as BYST mentor under National Mentor Membership Platform by Bharatiya Yuva Shakti Trust and trained to counsel budding young entrepreneurs from diverse backgrounds.
- Dr. K. T. Selvan, Prof/ECE as an oral board examiner, participated in the PhD viva voce of a candidate at SRM University on 25.09.2023.
- Dr. V. Vaithianathan, ASP/ECE attended a confidential work at Tamilnadu Public Service Commission (TNPSC), TNPSC Road, Chennai from 09.10.2023 to 10.10.2023.

- Dr. P. Kaythry ASP/ECE, received a certificate of honorable mentions in IEEE Women in Engineering for the outstanding paper presentation titled, “Engineering Education and Indian Students Perception on Environment and Sustainable Development: A comprehensive Study and Analysis” at IEEE TENCON 2023 held at Chang Mai, Thailand during 31.10.2023 to 03.11.2023.

- Dr. P. Kaythry, ASP/ECE chaired a session on “Networks” at IEEE TENCON 2023 held at Chang Mai, Thailand during 31.10.2023 to 03.11.2023, on 01.11.2023.

- Dr. P. Vijayalakshmi, Prof & Head/ECE have been nominated as an “Evaluator” by NIEPMD for SIH 2023 under the Ministry of Social justice and empowerment to evaluate the problem statement “Software for intervention of speech sound disorders in Hindi and English”. As an evaluator she evaluated 87 projects as an initial screening process.

- Dr. P. Vijayalakshmi, Prof & Head/ECE had a discussion with Prof. Vijay K. Chakka of SNU Noida for possible collaboration for the SNF funded projects on 08.11.2023 and 15.11.2023.

GUEST SPEAKERS

- In the monthly Learning & Teaching webinar series organized by the Griffith University, Australia, and SSN College of Engineering, Dr. K. T. Selvan, Prof/ECE gave a talk on “Reimagining assessment for higher education in India” on 25.08.2023.
- Dr. Joannes Sam Mertens, an alumnus of ECE delivered a talk on “Opportunities for Master’s Study at the University of Catania, Italy” on 09.09.2023.
- Mr. Ramasubramanian Sankar, an ECE alumnus delivered a talk on “Artificial Intelligence: Hype vs. Reality” on 23.09.2023 to II and III year students of ECE.
- Dr. K. T Selvan, Prof/ECE and Dr. G. Durga, ASP/ECE organized a guest lecture by Shri. T. S. Krishnamurthy, Former Chief Election Commissioner. He delivered the lecture titled “Election Laws and reforms” to the second year ECE students on 10.04.2023.
- Dr. K. T Selvan, Prof/ECE and Dr. G. Durga, ASP/ECE organized a guest lecture by Dr. C. Gopinath, Suffolk University, Boston, USA. He delivered the lecture titled “Gandhi and Money matters” to the second year ECE students on 28.04.2023.
- In the Learning & Teaching Webinar Series on Engineering Education organized by Griffith University, Australia and SSN CE, a talk by Dr. Divya John, ASP/English/SSN CE, on “Integrating Thinking Skills with Language Skills in the Engineering Curriculum” was organized on 25.10.2023.

FACULTY AS GUEST SPEAKERS

- Dr. S. Sakthivel Murugan, ASP/ECE delivered a talk on “Subsea Sensors” for IEEE Bangalore Section Sensors Council, Bangalore on 21.07.2023.
- Dr. S. Karthie, ASP/ECE delivered a guest lecture on “Parallel Plane Waveguides” at the Department of Electronics Engineering, MIT Campus, Anna University, Chennai on 26.07.2023.
- Dr. C. Annadurai, ASP/ECE delivered a guest lecture on the topic “Microprocessor and Microcontroller” to the ECE Students of Velammal Engineering College, Chennai on 17.08.2023.
- Dr. V. Vaithianathan, ASP/ECE acted as an examiner in the PhD viva-voce examination held at SRM University Chennai on 21.08.2023.
- Dr. P. Kaythry, ASP/ECE delivered a talk on “Sustainable Development Goals” for the first year students of Shiv Nadar University, Chennai on 09.09.2023.
- Dr.P.Kaythry, ASP/ECE delivered a talk on “ NSS Orientation” for the first year NSS volunteers of New Prince Shri Bhavani College of Engineering and Technology, Chennai on 12.10.2023.
- Dr. N. Edna Elizabeth, Prof/ECE delivered a lecture for the subject Apparel Production Planning and control (APPC) on the topic “Application of Electronics in Textiles and Apparel Manufacturing” through online mode for the Bachelor of Fashion Technology (BFTech) V semester students of NIFT Taramani, Chennai on 08.11.2023.

EVENTS ORGANIZED

1. Dr. S. Sakthivel Murugan, ASP/ECE and Dr. K. Muthumeenakshi, ASP/ECE conducted the international webinar on World Oceans Day - “Revitalization: Collective Actions for the Ocean” on 08.06.2023.

2. As part of the monthly Learning & Teaching webinar series organized by Griffith University, Australia and SSN, a talk by Dr. Uday Khankhoje, IIT Madras, on “Exploring self-limiting beliefs that hinder learning” was organized on 09.06.2023.

3. Dr. A. Jawahar, Prof/ECE coordinated the industry review Project phase-II for PG VLSI and AE students on 23.06.2023. The external reviewer was Mr. Karunadurai, Technical Architect, Continental Automotive Bangalore.

4. Dr. K. T. Selvan, Prof/ECE coordinated the industry review Project phase-II for PG CS students on 30.06.2023. The external reviewer was Mr. S. Prasad, Scientist E, SAMEER-CEM, Chennai.

5. Dr. P. Vijayalakshmi, Prof & Head/ECE and Dr. B. Ramani, ASP/ECE organized a Skill development program - Hands-on Training on “NAV Tools” for the technical assistants of SSN CE on 24.07.2023.

6. A Students Forum was conducted for second year students of SSNCE on 06.06.2023. This Forum was aligned with the course Indian Constitution. The topics given to the students were Professionalism and Excellence, Scientific spirit and Societal transformation through individual transformation. A total of 7 teams participated in the Forum. Merit certificates were awarded to the best three presentations and others received participation certificates. The event was organized by Dr. K.T. Selvan, Prof/ECE and Dr. G. Durga, ASP/ECE. Dr. Martha Karunakar, ASP & Head/English, was the Judge for the event.

7. Dr. P. Vijayalakshmi, Prof & Head/ECE, Dr. N. Venkateswaran, Prof/BME, Dr. R. Rajavel, ASP/ECE, Dr. J. Vijay, ASP/BME organized a two-day Workshop on “Introduction to MATLAB and Simulink for Artificial Intelligence with Low-cost Hardware Interfacing” during August 22-23, 2023.

8. Dr. R. Rajavel, ASP/ECE, Mr. Satyakam Baraha, AP/ECE, Dr. P. Kaythry, ASP/ECE organized an invited talk on “The Role of Entrepreneur in Nation Building” on 18.08.2023.

9. Dr. K. T. Selvan, Prof/ECE delivered a talk entitled “Reflection as a core practice in higher education” to ECE faculty on 12.08.2023.

10. Dr. B. Ramani, ASP/ECE & Dr. P. Vijayalakshmi, Prof & Head/ECE organized a skill upgradation program on “Introduction to Matlab for Beginners” on 09.09.2023 for the lab technicians.

11. Dr. B. Ramani, ASP/ECE & Dr. P. Vijayalakshmi, Prof & Head/ECE organized a Workshop on “Building a simple IoT system” on 14.10.2023 for the lab technicians.

12. Dr. S. Sakthivel Murugan, ASP/ECE conducted a workshop for placement “A day with Alumni for future alumni v8.0” on 18.11.2023.

13. Dr. K. T. Selvan, Prof/ECE organized a guest lecture by Mr. Duraisamy Rajan, Founder & CEO, Archimedes Digital, Chennai titled “Shifting gears from manager to entrepreneur” for the V semester ECE students as part of their Management elective course. Dr. B. Ramani, ASP/ECE assisted him in the same.

14. Dr. S. Sakthivel Murugan, ASP/ECE conducted a workshop for placement “A day with Alumni for future alumni v8.0” on 18.11.2023.

EVENTS ATTENDED

1. Dr. R. Hemalatha, ASP/ECE, attended the workshop on “Deep Learning based RF signal Classification: Hands-On” conducted by National Institute of Technology, Tiruchirappalli, as part of MDCWC2023 on 24.06.2023.

2. Dr. A. Jawahar, Prof/ECE attended an IEEE-IISc Webinar on “25 Years of IC Design in Twente: Some Eureka Moments” by Prof. Eric Klumperink on 27.06.2023.

3. Dr. C. Vinoth Kumar, ASP/ECE attended National Level Workshop on “Goals and Strategies for NAAC Accreditation” conducted by Sri Sivasubramaniya Nadar College of Engineering on 13.07.2023.

4. Dr. M. Anbuselvi, ASP/ECE has participated and successfully completed the workshop on “VLSI to System Design: Silicon to End application Approach” conducted by AICTE, ARM and ST Microelectronics, during 31.07.2023 to 04.08.2023.

5. Dr. Satyakam Baraha, AP/ECE participated and successfully completed the Online FDP on “Academics and Industry Applications leveraging Image Processing techniques (AIAIP)” organized by School of Electronics Engineering, VIT Vellore during September 19-21, 2023.

6. Dr. S. Karthie, ASP/ECE attended an international webinar on “Mobile Material Characterization and Localization by Electromagnetic Sensing” organized by IEEE MTT-S on 12.09.2023.

7. Dr. P. Kaythry, ASP/ECE attended a national level webinar on online training program on Swachhata Pakhwada-Swachhata Hi Sewa (SHS) 2023 conducted by the Ministry of Housing and Urban Affairs, GOI on 25.09.2023.

8. Dr. P. Kaythry ASP/ECE, attended a workshop on “Understanding Climate Change” organized by the American Center, US Consulate General, Chennai on 26.09.2023.

9. Dr. S. Karthie, ASP/ECE attended an international webinar on “Applications of Microwaves in Medicine” organized by IEEE MTT-S on 10.10.2023.

10. Dr. S. Karthie, ASP/ECE attended an international webinar on “High Performance RF, Millimeter-Wave, and Sub-THz Integrated Circuits and Systems” organized by IEEE IISc MTT/AP-S and IEEE IISc VLSI Student Branch Chapter, Bengaluru on 12.10.2023.

11. Dr. Satyakam Baraha, AP/ECE attended online innovation ambassador training ‘Foundation Level’ by MoE’s innovation cell and AICTE during the IIC calendar year 2022-23.

12. Dr. S. Karthie, ASP/ECE attended an international webinar on “Design of Electrically Small Antennas Using MAGTREX® Magneto-Dielectric Material” organized by Rogers Corporation on 29.11.2023.

PROFESSIONAL ROLES AND RECOGNITIONS

1. Dr. G. Durga, ASP/ECE has been elevated to the grade of IEEE senior member during June 2023.

2. Dr. S. Sakthivel Murugan, ASP/ECE received the “Best Teacher Award - First” for the academic year 2021-2022

Dr. S. Sakthivel Murugan, ASP/ECE received the “Best Teacher Award - First” for the academic year 2021-2022

RESEARCH CORNER

RESEARCH GRANTS

» The project titled “Efficient water management in agricultural fields using mule based sensor networks” under SPARC Scheme (Scheme for Promotion of Academic and Research Collaboration) is sanctioned by MHRD SPARC cell IIT Kharagpur, Government of India. An amount of Rs.63.10 Lakh is sanctioned to carry out the project. Dr. S. Radha, VP/SSN CE is Indian PI, Dr. R. Kishore, ASP/ECE, Dr. R. Hemalatha, ASP/ECE and Dr. Selvarajan R, Principal Scientist Plant Pathology and Virology Department, ICAR National Research Centre for Banana NRCB, Thiruchirapalli are the Indian Co-PIs for the project. Dr. Michael Segal, Professor, Department of Communication Systems Engineering, Ben Gurion University of the Negev is the International PI and Dr. Shlomi Dolev, Professor, Department of Computer Science, Ben Gurion University of the Negev is the International Co-PI for the project.

» The Department of ECE is short-listed to set-up a “5G use-case lab” worth Rs. 50 Lakh by the Department of Telecommunications, Ministry of communications. Dr. P. Vijayalakshmi, Prof & Head/ECE as the lead, Dr. R. Kishore, ASP/ECE, Dr. N. Edna Elizabeth, Prof/ECE, Dr. P. Kaythry, ASP/ECE, Dr. N. Prabagarane, ASP/ECE will be involved in setting up the lab.

» SERB-IMPRINT IIC-Consortium project worth Rs. 53 lakh is sanctioned. Consortium lead is IIT Dharwad and partners are Dr. T. Nagarajan, Prof & Head/CSE, SNU C and Dr. P. Vijayalakshmi, Prof & Head/ECE, SSNCE.

» Dr. P. Vijayalakshmi, Prof & Head/ECE got a sanction of USD 5000 from IEEE SPS to conduct 2023 Seasonal school on “Signal processing guided machine learning approaches for speech and audio applications”.

» The department of telecommunications, Govt. of India sanctioned the “5G Use Case Lab” set up at department of ECE. The PI is Dr. P. Vijayalakshmi, Prof & Head/ECE, Co-PIs are Dr. A. Jawahar, Prof/ECE, Dr. N. Edna Elizabeth, Dr. R. Kishore, Dr. P. Kaythry, Dr. N. Prabagarane, ASPs/ECE.

RESEARCH NEWS

1. Dr. S. Radha, Senior Professor & VP/SSN CE as PI of host institute, Dr. R. Selvarajan, Director/ NRCB as PI of partnering institute, Dr. R. Hemalatha, ASP/ECE as Co-PI and Mr. PG Ragavandir, CEO/BGNET as industrial partner submitted a proposal titled “Energy efficient Animal intrusion Detection and Prevention System with On Device ML models” to DST Technology Development Programme for funding worth Rs.73.66 Lakhs.

2. Dr. P. Vijayalakshmi, Prof & Head/ECE attended project progress meetings MeiTy, HCL and IMPRINT IIC.

3. Dr. B. Anil Babu, who received his PhD earlier this year from KL University, Vijayawada, submitted a proposal titled “Design and Development of Reconfigurable Intelligent Surface for Futuristic mm-wave Communications” for the National Post Doctoral Fellow scheme of SERB on 05.08.2023. His proposed mentor is Dr. K. T. Selvan, Prof/ECE and the host institute is SSN CE.

4. Dr. P. Kaythry, ASP/ECE as PI submitted a proposal titled “Improving the hygiene and sanitation facility of Govt. Rural School students” to Direct Aid Programme of Australian Embassy for funding worth Rs.5 Lakh.

5. Dr. P. Vijayalakshmi, Prof & Head/ECE attended the weekly project progress meetings with HCL and SERB-IMPRINT IIC.

6. Dr. W. Jino Hans, ASP/ECE as PI, Dr. B. Ramani, ASP/ECE and Dr. P. Vijayalakshmi, Prof & Head/ECE as Co-PIs submitted a proposal titled “A Stand-alone Assistive Device for the Elderly to Read Vital Information from Packed Consumer Products” to DST under Technology Interventions for Disabled and Elderly (TIDE) Programme for funding worth Rs. 15.14 Lakh.

7. Dr. M.P. Actlin Jeeva, AP/ECE as PI, Dr. P. Vijayalakshmi, Prof. & Head/ECE as Co-PI submitted a project proposal titled “SSN Voicebank in Colloquial Tamil- A database for future” worth Rs. 1.9 Lakh for internal funding.

8. Dr. Satyakam Baraha, AP/ECE as PI submitted a project titled “Development Infrared Image Super Resolution Algorithms using Variational Methods” worth Rs. 0.7 Lakh for internal funding.

9. Dr. B. Sakthi Abirami, AP/ECE as PI submitted a project titled “Chipless RFID Sensor for Car Safety Management System” worth Rs. 0.46 Lakh for internal funding.

10. Dr. S. Aasha Nandhini, AP/ECE as PI, Dr. R. Hemalatha, ASP/ECE as Co-PI submitted a project proposal titled “Development of Embedded Tiny Vision Mule for Smart agriculture” worth Rs. 3.425 Lakh for internal funding.

11. Dr. C. Annadurai, ASP/ECE conducted the Ph.D viva-voce examination for his scholar Mr. M. Varun on 11.09.2023.

12. SSN Innovation Day was celebrated on 06-09-2023. The event was inaugurated by Dr. Shankar Venugopal, the Vice President of Mahindra & Mahindra. Industrial experts from several leading companies visited our institute and witnessed the display of the innovative projects done by students and faculty. The Department of ECE showcased 5 student projects and 8 faculty projects. The projects were well appreciated by the industrial evaluators and few representatives have shown interest in collaborating with the department on specific projects. They also suggested students to take up internships in startup companies for better exposure.

13. Dr. P. Vijayalakshmi, Prof & Head/ECE & Dr. P. Kaythry, ASP/ECE visited the National Institute for Empowerment of Persons with Multiple Disabilities (NIEPMD), Muttukadu, had a discussion on opportunities for SSN/ECE & NSS students for outreach activities, providing technical support, with Registrar and Department Heads on 07.09.2023.

14. Mr. Satyakam Baraha, AP/ECE defended his thesis titled “Development of Efficient Speckle Suppression Algorithms for SAR Images” under the guidance of Dr. Ajit Kumar Sahoo, ASP/NIT Rourkela on 09.09.2023 at NIT Rourkela and received his doctoral degree on 14.09.2023.

15. Dr. K. Muthumeenakshi, ASP/ECE conducted the Ph.D viva-voce examination for her scholar Ms. I. Divya on 19.10.2023.

16. Dr. R. Hemalatha, ASP/ECE, Dr. S. Aasha Nandhini, AP/ECE showcased their plant disease detection device in the “Banana Stakeholders Interactive Meet” organized by ICAR-National Research Centre for Banana, Tiruchirappalli on 26.08.2023 which was presided over by The Honourable Governor of Tamil Nadu, Shri. R.N. Ravi.

17. Dr. N. Edna Elizabeth, Prof/ECE as a Panel Member, participated and reviewed the projects at Hackinfinity in Invente 6.0 conducted by the tech club of ECE department on 06.10.2023 & 07.10.2023 at SSNCE.

18. Dr. P. Vijayalakshmi, Prof & Head/ECE attended project progress meeting of HCL Shiksha Initiative on 06.10.2023 & 20.10.2023.

19. Dr. P. Vijayalakshmi, Prof & Head/ECE attended project progress meeting of S2ST IMPRINT II C project every week Monday and Friday during October 2023 and presented the progress made on the project to the consortium members and to the industry partners.

20. Dr. P. Vijayalakshmi, Prof & Head/ECE attended the inaugural session of IMC 2023 virtually and the 5G use case lab was sanctioned for SSNCE on 27.10.2023.

21. Dr. Satyakam Baraha, AP/ECE delivered a technical talk on “Optimization in Machine Learning” at the Department of ECE, SSN CE on 27.10.2023.

22. Dr. R. Rajavel, ASP/ECE, Dr. A. K. Lakshminarayanan, ASP/Mech, Mr. Krishnasamy, AP/Mech & Dr. K. B. Sundhara Kumar, AP/CSE/SNU Chennai submitted a project proposal titled “Design and Development of an Intelligent Predictive Maintenance Framework for Industry 4.0” for Shiv Nadar Foundation’s Inter-Institution Collaboration Grants.

23. Dr. R. Arun, AP/EEE as PI, Dr. S. Sakthivel Murugan, ASP/ECE, Dr. G. Satheesh Kumar, ASP/Mech, Dr. P. Mirunalini, ASP/CSE as Co-PIs & Dr. P. Ganesh Thangaraj, ASP/Mech/SNU Noida submitted a project proposal titled “Design, Development and Implementation of Semi-Autonomous Amphibious (SAAM) ROV for Cleaning Aquatic Ecosystems” worth Rs. 39.88 Lakh for Shiv Nadar Foundation’s Inter-Institution Collaboration Grant.

24. Dr. S. Sakthivel Murugan, ASP/ECE conducted the Ph.D viva-voce examination for his scholar Ms. M. Dhanalakshmi on 24.11.2023.

25. Dr. S. Radha, VP/SSN CE, Dr. K. Muthumeenakshi, ASP/ECE and Ms. K. Vijayalakshmi, RS/JRF/ECE attended the third progress review meeting of the DST-TMD funded project on 06.11.2023.

26. Dr. P. Vijayalakshmi, Prof & Head/ECE attended the project review steering group meeting of MeiTy on 06.11.2023 and presented yearly project progress for the “Assistive speech technologies” of NLTM-BHASHINI.

27. Dr. P. Vijayalakshmi, Prof & Head/ECE attended the progress meeting of HCL technologies consultancy project on “Development of Machine translation systems” on 07.11.2023 and presented the monthly progress to the HCL committee.

28. Dr. N. Edna Elizabeth, Prof/ECE has reviewed the IFSP projects (for 8 batches) for ECE students on 17.11.2023 in the EEE seminar hall.

29. Dr. K. T. Selvan, Prof/ECE completed a University of Edinburgh course on “Learning for a sustainable future” in Coursera on 23.11.2023.

30. Dr. B. Sakthi Abirami, AP/ECE delivered a technical talk on “Experiential Learning in Innovation for Sustainability” at the Department of ECE, SSN CE on 25.11.2023.

JOURNAL PUBLICATIONS

1. Ms. Tejaswini Panati, Ms. I. Sai Deepika, Dr. S. Sakthivel Murugan, ASP/ECE published a paper titled “Modeling and performance analysis of open-loop remotely operated vehicles ORCA” in the IAES International Journal of Robotics and Automation (IJRA), vol. 12 (1), pp. 108-124 , March 2023.

2. Ms. I. Divya, RS/ECE, Dr. K. Muthumeenakshi, ASP/ECE, Dr. S. Radha, VP/SSNCE published a paper titled “Statistical analysis of radiofrequency energy harvester with bandpass filter for ultra-low power applications” in the International Journal of Numerical Modelling, vol. 36 (4), pp. 1 - 25, November 2022.

3. Dr. R. Athilakshmi, Faculty/SRMIST, Dr. Shomona Gracia Jacob, Faculty/ University of Technology and Applied Sciences, Sultanate of Oman, Dr. R. Rajavel, ASP/ECE published a paper titled “Automatic Detection of Biomarker Genes through Deep Learning Techniques: A Research Perspective” in the Studies in Informatics and Control, vol. 32 (2), pp. 5-15, June 2023.

4. Ms. K. J. Subha, Faculty/Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, Dr. R. Rajavel, ASP/ECE, Dr. B. Paulchamy, Hindusthan Institute of Technology, Coimbatore published a paper titled “Improved ensemble deep learning based retinal disease detection using image processing” in the Journal of Intelligent & Fuzzy Systems, vol. 45, pp. 1119–1130, June 2023.

5. Dr. B. Ashvanth, Faculty/Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Dr. B. Partibane, ASP/ECE published a paper titled “Miniaturized dual wideband MIMO antenna for implantable biomedical applications” in Microwave and Optical Technology Letters, vol. 65, pp. 1-7, August 2023. (Clarivate Analytics, IF: 1.392)

6. Ms. Nethra Sivakumar, Ms. Pooja Srinivasan, UG-ECE 2018-22 Batch students, Dr. K. Mrinalini, Dr. P. Vijayalakshmi, Prof & Head/ECE, Dr. T. Nagarajan, Prof & Head/CSE/SNU C published a paper titled “PooRaa-Agri KG: An agricultural knowledge graph-based simplified multilingual query system” in Expert systems, pp. 1-7, August 2023 (Published Online).

7. Dr. N. Kavitha, Dr. M. Gulam Nabi Alsath, Faculty/CEG, Dr. S. Karthie, ASP/ECE published a paper titled “Development of bandwidth-enhanced X–Ku band reflectarray antenna using a novel design strategy” in International Journal of Communication Systems, vol. 36 (14) e5552, August 2023.

8. Ms. Nimisha Pabbichetty, Mr. R. Sai Aakash, Ms. S. Sandhiya, Mr. S. Shankrith Chokkalingam, UG-ECE 2018-22 Batch students, Dr. M. Anbuselvi, ASP/ECE published a paper titled “Grasp pose detection for control of an assistive robotic manipulator” in the AIP Conference Proceedings, vol. 2788 (1), 040006, July 2023.

9. Dr. Praveen Kumar, Dr. Manohara Pai MM, Manipal Institute of Technology, Dr. Pradeep Kumar, University of KwaZulu-Natal, Dr. Tanweer Ali, Manipal Institute of Technology, Dr. M. Gulam Nabi Alsath, ASP/ECE, Ms. S. Vidhyashree, RS/ECE published a paper titled “Characteristics Mode Analysis-Inspired Compact UWB Antenna with WLAN and X-Band Notch Features for Wireless Applications” in Journal of Sensor and Actuator Networks, vol. 12 (3), June 2023.

10. Dr. M. Gulam Nabi Alsath, ASP/ECE, Dr. P. Devi Sowjanya, Faculty/ Amrita School of Engineering, Dr. S. Kirubaveni, ASP/ECE, Ms. V. Indu published a papert titled “Optically Transparent MIMO Antenna with Polarisation Diversity for Vehicular Communications” in International Journal of Electronics, pp. 1-17, June 2023 (Published Online). DOI: https://doi.org/10.1080/00207217.2023.2221456

11. Ms. G. Geethanjali, RS/ CEG, Dr. M. Gulam Nabi Alsath, ASP/ECE, Dr. S. Kirubaveni, ASP/ECE, Dr. V. Aruna, Faculty/ Panimalar Engineering College published a paper titled “Miniaturized electromagnetic absorber for millimeter□wave RADAR Systems” in Springer’s Applied Physics A 129, 577 July 2023 (Published Online). DOI: https://doi.org/10.1007/s00339-023-06857-x

12. Dr. Shyama Wickramasinghe, Dr. Jeevani Jayasinghe, Wayamba University of Sri Lanka, Dr. M. Gulam Nabi Alsath, ASP/ECE, Dr. Melaka Senadeera, School of Arts and Sciences, Carolina University, North Carolina, Dr. K. Malathi, Faculty/CEG published a paper titled “A Compact Energy Harvesting RFID Tag for Smart Traffic Law Enforcement Systems” in Progress In Electromagnetics Research C, vol. 135, pp. 181- 193, August 2023.

13. Dr. S. V. Jansi Rani, ASP/CSE, Dr. Iacovos Ioannou, University of Cyprus, Dr. N. Prabagarane, ASP/ECE, Dr. Christophoros Christophorou, University of Cyprus, Dr. Vasos Vassiliou, University of Cyprus, Ms. Harshitaa Yarramsetti, Mr. Sai Shridhar, Mr. L Mukund Balaji, UG-CSE students, Dr. Andreas Pitsillides, University of Cyprus published a paper titled “A Novel Deep Hierarchical Machine Learning Approach for Identification of Known and Unknown Multiple Security Attacks in a D2D Communications Network” in IEEE Access, vol. 11, pp. 95161-95194, August 2023.

14. Dr. S. Karthie, ASP/ECE, Ms. K. Rakshaa Madhuri, Ms. G. Varshini, Ms. R. Shwathi, UG-ECE 2019-2023 batch students published a paper titled “Compact fractal-based bandpass filter with high selectivity for terahertz applications” in Optical and Quantum Electronics, vol. 55 (11), Article no. 960, November 2023. (Published on 02 September 2023).

15. Ms. R. Subashini, PG-CS Batch, Dr. R. Hemalatha, ASP/ECE, Dr. K. Muthumeenakshi, ASP/ECE published a paper titled “Dictionary Learning Based Adaptive Defect Detection in Complex Fabric Textures” in International Journal of Computing and Digital Systems, vol. 14 (1), pp. 769-778 September 2023.

16. Dr. R. Hemalatha, ASP/ECE, Dr. K. Muthumeenakshi, ASP/ECE, Dr. S. Radha, VP/SSN CE published a paper titled “A neural-network-based machine-learning model for fabric defect detection and classification using fused global features” in Australian Journal of Electrical and Electronics Engineering, pp. 1-6, September 2023 (Published Online), DOI: https://doi.org/10.1080/1448837X.2023.2247605.

17. Dr. R. Swathika, ASP/IT, Dr. N. Radha, ASP/IT, Dr. K. S. Vishvaksenan, ASP/ECE published a paper titled “A Miniaturized Penta-band Metamaterial THz Absorber for Sensing and Imaging Applications” in Plasmonics, vol. 18, pp. 1933-1940, October 2023.

18. Dr. C. Annadurai, ASP/ECE, Dr. I. Nelson, ASP/ECE, Dr. K. Nirmala Devi, ASP/Kongu Engineering College published a paper titled “A Novel Intelligent Approach for Efficient Detection of Respiratory Infections Combining Face Mask Detection and Thermal Images on Embedded Devices” in SN Computer Science, vol. 4:801, pp. 1-13, October 2023, DOI: https://doi.org/10.1007/s42979-023-02275-1.

19. Mr. M. Vimal Raj, RS/ECE, Dr. S. Sakthivel Murugan, ASP/ECE published a paper titled “Veracious Interpolated Measure of Angle and Length for Underwater Motion Blurred Images” in Fluctuation and Noise Letters, vol. 22 (5), 2350034, October 2023.

20. Dr. S. Hanis, ASP/ECE, Mr. S. Abinav Narayanan, Mr. P. Abishek Viswanath, Mr. V. Bhooshan, UG-ECE 2018-2022 Batch students published a paper titled “Satellite and Aerial Image Restoration Using Deep Reinforcement Learning” in Fluctuation and Noise Letters, vol. 22 (5), 2350039, pp.1-14, October 2023.

21. Ms. K. Vijayalakshmi, RS/ECE, Dr. S. Radha, VP/SSN CE, Dr. K. Muthumeenakshi, ASP/ECE, Dr. B. S. Sreeja, ASP/CEG published a paper titled “Electrochemical sensing of nickel using modified silver nanoparticles/bismuth oxybromide graphite electrode” in the Journal of Materials Science: Materials in Electronics, vol. 34 (25), pp. 1-12, August 2023.

22. Dr. K. Muthumeenakshi, ASP/ECE published a paper titled “A Segmentation based Classification Model for Primary User Detection Using Deep Learning Techniques” in the International Journal of Computing and Digital Systems, vol. 13 (1), pp. 403-411, August 2023.

CONFERENCE / SEMINAR PUBLICATIONS

» Ms. A. J. Bhuvaneshwari, RS/ECE attended and presented the paper titled “Enhanced Visual Cryptosystem using BLAKE 2 Hash Algorithm” at The 2023 International Conference on Industry 4.0, Artificial Intelligence, And Communications Technology (IAICT), organized by Telkom University, in Bali, Indonesia from July 13-15, 2023.

» Ms. S. Snehalakshmi, Dr. P. Devisowjanya, Faculty/Amrita School of Engineering and Dr. B. Sakthi Abirami, AP/ECE published a paper titled “Wearable KneeCap Microwave Sensor for Osteoarthritis Detection” in the 2023 IEEE XXVIII International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED), Tbilisi, Georgia, 2023, pp. 171-175.

» Dr. P. Kaythry, ASP/ECE presented a paper titled “Engineering Education and Indian Students’ Perception on Environment and Sustainable Development: A Comprehensive Study and Analysis” in IEEE TENCON 2023 held at Chang Mai, Thailand during 31.10.2023 to 03.11.2023.

» Dr. S. Sakthivel Murugan, ASP/ECE participated and co-presented paper titled “A Study on Passive Acoustics Monitoring of Underwater Mammals - Black Tilapia” in 3rd International Conference on Signal & Data Processing held at VIT Bhopal during November 3-4, 2023.

» Dr. S. Sakthivel Murugan, ASP/ECE participated and co-presented paper titled “Augmenting Remotely Operated Vehicles with Autonomous Robotic Manipulators” in 3rd International Conference on Signal & Data Processing held at VIT Bhopal during November 3-4, 2023.

» Dr. P. Kaythry, ASP/ECE co-authored the paper titled “National Adventure Camp Reflections: Exploring Sustainability Goals through National Service Scheme” presented by Mr. M. Muthuvelan, UG Student/ Mech at the National Seminar on Interweaving Sustainable Development Goals through National Service Scheme at MIT, Chrompet, Chennai on 03.11.2023.

CONSULTANCY

The department of electronics and communication facilitated the consultancy of Antenna and Filter Measurements for external researchers and industry and generated a sum of Rs. 94,400/- as revenue from June 2023 - November 2023.

STUDENT PROJECTS

1. Mr. M. Gopinath, Mr. B. Haricharan, Mr. Joshua Daniel, UG-ECE 2021-25 Batch students under the guidance of Dr. B. Ramani, ASP/ECE submitted a proposal titled “Handwritten Mathematical Expression Recognition from video lectures” for student internal funding.

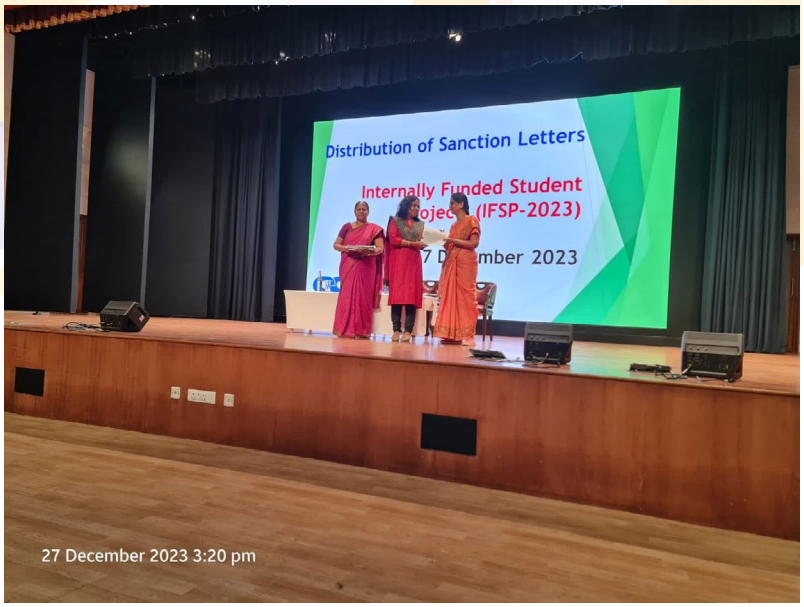
2. Mr. R. Chanakya, Ms. SS Indhra, Ms. K. Leka, UG-ECE 2022-26 Batch students under the guidance of Dr. N. Edna Elizabeth, Prof/ECE submitted a project proposal titled “Warning App development for road safety in autonomous vehicles” for student internal funding.

3. Mr. K. Jayaprakash, Mr. R. Jeevanandham, Ms. K. Kalaiselvi, UG-ECE 2022-26 Batch students under the guidance of Dr. N. Edna Elizabeth, Prof/ECE submitted a project proposal titled “Pollution monitoring and detection in green campus (SSNCE) using IOT through APP development” for student internal funding.

4. Ms. D. Nazreen, Ms. S. Niveditha, UG-ECE 2021-25 Batch students under the guidance of Dr. N. Edna Elizabeth, Prof/ECE submitted a project proposal titled “Contactless Charging of Mobile Phones Using RFID” for student internal funding.

5. Mr. A. Sreenivas, Mr. M. Siva Prasath, Mr. R. Rohith, UG-ECE 2022-26 Batch students under the guidance of Dr. N. Edna Elizabeth, Prof/ECE submitted a project proposal titled “Contactless door bell using IOT” for student internal funding.

6. Ms. J. Haritha, UG-ECE 2021-25 Batch, Ms. R. Aarthi, Ms. R. Vinodhini, UG-EEE 2021-25 Batch students under the guidance of Dr. M. P. Actlin Jeeva, AP/ECE submitted a project proposal titled “Lombard speech synthesizer for PA systems” for student internal funding.



7. Mr. A. Aswin Dava, Mr. S. Ashiq, Mr. S. Harshavardan, UG-ECE 2022-26 Batch students under the guidance of Dr. M. P. Actlin Jeeva, AP/ECE submitted a project proposal titled “Personalised synthetic voice communication tool” for student internal funding.

8. Mr. M. R. Manoj, Mr. R. Mukund, Ms. V. Padmapriya, UG-ECE 2021-25 Batch students under the guidance of Dr. B. Sakthi Abirami, AP/ECE submitted a project proposal titled “RF Sensor for Precise Monitoring of Moisture and Nutrients in agriculture” for student internal funding.

9. Ms. Krupanidhi Dwidashini, Ms. C. Shruti, Ms. B. Shweatha, UG-ECE 2022-26 Batch students under the guidance of Dr. C. Vinoth Kumar, ASP/ECE submitted a project proposal titled “AI-based Leaf Disease Identification using IoT” for student internal funding.

10. Mr. K. Vijay Balachandar, UG-ECE 2021-2025 batch under the guidance of Dr. S. Sakthivel Murugan, ASP/ECE submitted a project proposal titled “Underwater Energy harvesting System using ocean water and solar cell” for student internal funding.

11. Ms. S. Nisha Nethra, Mr. M. Pranav, UG-ECE 2020-2024 Batch students, Mr. S. Sivashankar, UG -ECE 2021-2025 batch student under the guidance of Dr. S. Sakthivel Murugan ASP/ECE submitted a project proposal titled “Enhancement and Restoration of Blurred Underwater Images” for student internal funding.

12. Ms. W. V. Kethanaa, Ms. J. Nishanthni, Ms. S. Sukeerthi, UG-ECE 2022-26 Batch students under the guidance of Dr. P. Kaythry, ASP/ECE submitted a project proposal titled “Adaptive Traffic system based on Traffic Density” for student internal funding.

13. Mr. M. N. Vishnu Rajhan, Ms. V. Rupasree, Ms. S. Pranathi, UG-ECE 2022-26 Batch students under the guidance of Dr. P. Kaythry, ASP/ECE submitted a project proposal titled “Weather monitoring system for Smart rooftop Gardening” for student internal funding.

14. Ms. V. Chinmaiyee, Ms. Bandaru Kundana Sri, Ms. Divya Jha, UG-ECE 2022-26 Batch students under the guidance of Dr. P. Kaythry, ASP/ECE submitted a project proposal titled “Safety for paragliders based on atmospheric pressure prediction and monitoring using IoT” for student internal funding.

15. Ms. M. Anusha, Ms. Aislin Joe, Ms. Anumeha, UG-ECE 2022-26 Batch students under the guidance of Dr. R. Amutha, Prof/ECE submitted a project proposal titled “IoT based smart granary monitoring system” for student internal funding.

16. Mr. DYR Anish Kumar, Mr. C. Arun Prakash, Ms. Anjana Narayana Rao, UG-ECE 2021-2025 Batch students under the guidance of Dr. V. Vaithianathan, ASP/ECE submitted a project proposal titled “RF Antenna Design and High Frequency Wide Band Analysis” for student internal funding.

17. Mr. M. M. Bharath Ram, Mr. R. D. Karthik Raju, Mr. R. Gokulakrishnan, UG-ECE 2021-2025 Batch students under the guidance of Dr. R. Rajavel, ASP/ECE submitted a project proposal titled “Electrical Fault Diagnosis of Industrial Machines” for student internal funding.

18. Mr. T. Kavin Rengasamy, Mr. K. Pugazhenghi, Mr. T. A. Jagadish Prasanna, UG-ECE 2022-2026 Batch students under the guidance of Dr. R. Rajavel, ASP/ECE submitted a project proposal titled “An Image Descriptor for Visually Challenged People” for student internal funding.

19. Mr. M. Srivatsan, Mr. M. Srinivasa Poojith, Mr. M. Yuvan, UG-ECE 2022-2026 Batch students under the guidance of Dr. R. Rajavel, ASP/ECE submitted a project proposal titled “Smart Parking System” for student internal funding.

20. Ms. D. Sowmika, Ms. RN. Sirisha, Ms. Anamika Arivu, UG-ECE 2022-26 Batch students under the guidance of Dr. K. Muthumeenakshi, ASP/ECE submitted a project proposal titled “Smart Optical Nano Sensor for Copper Detection in Aqueous Media” for student internal funding.

21. Ms. E. Kaaviya, Ms. P. Kavinshree, UG-ECE 2022-26 Batch students, Mr. D. Yhokesh, UG-EEE 2022-26 batch under the guidance of Dr. K. Muthumeenakshi, ASP/ECE submitted a project proposal titled “Energy consumption prediction for domestic using machine learning techniques” for student internal funding.

22. Mr. Revan Kumar Kirubakaran, Mr. C. Sanjay, Mr. Shiva Yogesh, UG-ECE 2022-2026 Batch students under the guidance of Dr. W. Jino Hans, ASP/ECE submitted a project proposal titled “Extraction of information from curved surfaces using computer vision techniques” for student internal funding.

23. Mr. M. Sivabharathi, Mr. J. Karthikeyan, Mr. TE. Arvindh, UG-ECE 2022-2026 Batch students under the guidance of Dr. B. Partibane, ASP/ECE submitted a project proposal titled “An IoT Enabled Smart Farming System to maximize the Farmer’s Yield” for student internal funding.

24. Mr. L. Kishore, Mr. S. Karun Pias Aro, UG-ECE 2022-2026 Batch students under the guidance of Dr. G. Durga, ASP/ECE submitted a project proposal titled “Develop a system to detect objects behind steel wall” for student internal funding.

25. Mr. G. Cristen, Mr. R. B. Kavin, Mr. G. Aswinraghav, UG-ECE 2021-2025 Batch students under the guidance of Dr. S. Aasha Nandhini, AP/ECE submitted a project proposal titled “Edge based Video Surveillance System for Anomaly Detection” for student internal funding.

26. Mr. R. Sreeram, UG-ECE 2022-2026 Batch, Ms. V. Rithvikha, UG-EEE 2022-2026 Batch, Mr. G. Kavin Rajan, UG-CSE 2022-2026 Batch students under the guidance of Dr. M. Anbuselvi, ASP/ECE submitted a project proposal titled “Prediction of Remaining Useful Time for EV-battery health monitoring” for student internal funding.

27. Ms. T. S. Karthayani, Ms. G. Gracia, UG-ECE 2022-2026 Batch students under the guidance of Dr. M. Anbuselvi, ASP/ECE submitted a project proposal titled “Sensors enabled Assistive systems” for student internal funding.

28. Mr. S. M. Abinesh Varun, Mr. D. Gowtham, Mr. Hritic Sunder, UG-ECE 2022-2026 Batch students under the guidance of Dr. M. Anbuselvi, ASP/ECE submitted a project proposal titled “Electric Vehicle-to-Vehicle Energy Transfer Using On-Board Converters” for student internal funding.

29. Ms. V. Chathurya, Ms. S. Harshini, UG-ECE 2021-2025 Batch students, Ms. Shakthishree, UG-CSE 2021-2025 Batch student under the guidance of Dr. M. Anbuselvi, ASP/ECE submitted a project proposal titled “IoT based Manhole Monitoring System” for student internal funding.

30. Mr. S. A. Nantha Kumar, Mr. BKS Dinesh, Ms. C. G. Jayashree, UG-ECE 2021-2025 Batch students under the guidance of Dr. M. Anbuselvi, ASP/ECE submitted a project proposal titled “Smart voice assisted wheelchair” for student internal funding.

31. Ms. S. V. Swetha, Ms. K. Aruna, Ms. Padmaja, UG-ECE 2022-2026 Batch students under the guidance of Dr. R. Kishore, ASP/ECE submitted a project proposal titled “Charging IoT devices using footsteps” for student internal funding.

32. Ms. S. Shri Dharshini, UG-ECE 2021-2025 Batch, Mr. P. A. Manickam, UG-CSE 2021- 2025 Batch students under the guidance of Dr. P. Vijayalakshmi, Prof & Head/ECE submitted a project proposal titled “Smart notice boards (various activities) through speech” for student internal funding.

33. Mr. V. Madhan, Mr. S. Sivaprasath, Ms. J. Harshini, UG-ECE 2022-2026 Batch students under the guidance of Dr. K. J. Jegadish Kumar, ASP/ECE submitted a project proposal titled “IoT-based smart aquarium” for student internal funding.

34. Mr. K. Aravinth, Mr. N. Sri Sai Niranjan, UG-ECE 2022-2026 Batch students under the guidance of Dr. R. Hemalatha, ASP/ECE submitted a project proposal titled “A TinyML based Solution for Smart Agriculture” for student internal funding.

35. Mr. K. Harish Balaji, Mr. B. Pragdeesh, UG-ECE 2021-2025 Batch students, Mr. T. Sudhakaran, UG-IT 2021-2025 Batch student under the guidance of Dr. A. Jawahar, Prof/ECE submitted a project proposal titled “Remote Water Quality Monitoring and Alert System” for student internal funding.

36. Ms. A. Rachel Tania, Ms. R. Rupadharshini, Ms. R. Biancaa, UG-ECE 2022-2026 Batch students under the guidance of Dr. A. Jawahar, Prof/ECE submitted a project proposal titled “Forewarning of Goat Diseases Diagnosis using IoMT to improve the Productivity and Economy of small and big farming” for student internal funding.

37. Ms. S. Kavya, UG-ECE 2022-2026 Batch, Ms. Mirthulaa Shree, Ms. Dharshini, UG- Chemical 2022-2026 Batch students under the guidance of Dr. S. Hanis, ASP/ECE submitted a project proposal titled “Automated testing of product defects in textile industry using machine learning” for student internal funding.

38. Ms. G. Kirthika, Mr. C. Shreejeevan, Ms. S. Pavithra, UG-ECE 2022-2026 Batch students under the guidance of Dr. K. J. Jegadish Kumar, ASP/ECE submitted a project proposal titled “Wireless RF Enegry harvesting using 5G Antenna” for student internal funding.

39. Mr. B. Justin Benito, Ms. V. Poojitha Shree, UG-ECE 2022-2026 Batch students, Mr. S. Tharun Karthikeyan, UG-EEE 2022-26 Batch under the guidance of Dr. S. Karthie, ASP/ECE submitted a project proposal titled “Efficient Vehicle Management System using Automatic Number Plate Recognition (ANPR)” for student internal funding.

40. Mr. K. Madhesh, Mr. S. Elango, UG-ECE 2023-2027 Batch students, under the guidance of Dr. S. Radha, VP/SSN CE received the IFSP grant worth Rs.34,000/- for their project proposal titled “Detection of cadmium ions in surface water”.

41. Ms. Dona Merlin Rony, Ms. D. L. Reya Pearlin, Ms. S. Srinisha, Ms. Vidula Balamurugan, UG-ECE 2023-2027 Batch students, under the guidance of Dr. S. Aasha Nandhini, AP/ECE received the IFSP grant worth Rs.10,000/- for their project proposal titled “Edge AI-Based Fall Detection system”.

42. Ms. G. Aswathi, Mr. S. Pevin, Mr. V. Shanmugasundaram, Mr. Yuvan Shankar, UG-ECE 2023-2027 Batch students, under the guidance of Dr. M. Anbuselvi, ASP/ECE received the IFSP grant worth Rs.23,000/- for their project proposal titled “IoT based battery monitoring system for electric vehicle”.

43. Mr. U. Saran Kishore, Mr. B. A. Kishore, Mr. B. Rahul, Mr. S. Sarvesh, UG-ECE 2023-2027 Batch students, under the guidance of Dr. P. Karuppasamy/SSN RC received the IFSP grant worth Rs.28,000/- for their project proposal titled “Design and development of automatic diameter controller for CZ crystal growth system”.

44. Ms. R.S. Amizhdhiniy, Ms. Z. Shathiha Fathima, Ms. V. P. Geetha, UG-ECE 2023-2027 Batch students, under the guidance of Dr. M. P. Actlin Jeeva, AP/ECE received the IFSP grant worth Rs.14,000/- for their project proposal titled “Speech enabled system for medical diagnosis”.

45. Mr. A. Moulieswaran, Mr. R. Santhosh Kumar, Mr. R. Sakthi, UG-ECE 2023-2027 Batch students, under the guidance of Dr. M. Srinivasan/SSN RC received the IFSP grant worth Rs.32,000/- for their project proposal titled “Experimental analysis of novel silver-based crystal grown by Brigman method for thermoelectric application”.

46. Mr. Alwin, Mr. Udhayaa, UG-ECE 2023-2027 Batch students, Mr. Harsha Vardhan, UG-EEE 2023-2027 Batch student under the guidance of Dr. P. Kaythry, ASP/ECE received the IFSP grant worth Rs.14,000/- for their project proposal titled “Empowering deaf individuals with smart alarming”.

47. Ms. N. Harini, Ms. R. Mahalakshmi, Ms. N. Vishvadharini, UG-ECE 2023-2027 Batch students, under the guidance of Dr. M. Srinivasan/SSN RC received the IFSP grant worth Rs.32,000/- for their project proposal titled “Machine Learning on Multi-crystalline silicon wafers for solar cell”.

48. Mr. V. Praneeth, Mr. C. Sathiya Naarayanan, Mr. G. Praveen, Mr. S. Nithish, UG-ECE 2023-2027 Batch students, under the guidance of Dr. P. Karuppasamy/SSN RC received the IFSP grant worth Rs.28,000/- for their project proposal titled “Design and Fabrication of nano stepper motor controller for vertical Bridgman crystal growth system”.

CO - CURRICULAR ACTIVITIES

1. Mr. Samuel Robinson, Mr. Shridhar Sriram, Mr. S. Sujay Samuel, Mr. M.G. Vijay Krishna, UG-ECE 2020-2024 Batch students, submitted an idea proposal titled "Comprehensive IoT system for Enhancement of Mass transport in Urban Areas" in the Inventor's Challenge 2023 launched by AICTE in association with Arm Education and ST Microelectronics with themes focusing around G20 and Sustainability goals on 10.08.2023. Dr. R. Kishore, ASP/ECE is the faculty mentor.

2. Mr. R.Ajitessh, UG-ECE 2022-2026 Batch participated in a 2-day workshop on "Artificial Intelligence with ChatGPT" conducted by Techobytes Technologies at IIT Madras Research Park, Chennai on 01.07.2023 & 02.07.2023.

3. Mr. R.Ajitessh, UG-ECE 2022-2026 Batch attended a two-day workshop on "Ethical Hacking & Cyber Security" at IIT Madras Research Park, Chennai on 12.08.2023 & 13.08.2023.

4. Ms. S. Tejaswi, UG-ECE 2020-2024 Batch demonstrated the prototype titled "IoT based smart refrigerated food monitoring system" during the SSN Innovation Day which was held on 05.09.2023. Dr.R.Kishore is the faculty mentor.

5. Mr. R.Samuel Robinson, UG-ECE 2020-2024 Batch won Second place in the SSN Innovation Day, at SSN College of Engineering held on 06.09.2023.

6. Mr. S.Karun Pias Aro, Mr. Johann Sylvester, Ms. S.Indhra, UG-ECE 2022-2026 Batch participated in the event Relay Resonance in event TESLA organized by AECE on 14.09.2023 and secured first position in the competition.

7. Mr. S.Karun Pias Aro, UG-ECE 2022-2026 Batch attended the workshop on "PCB Design" organized by AECE in the event TESLA on 14.09.2023.

8. Mr. S.Harshavardan, UG-ECE 2022-2026 Batch & Mr. H.Joel Jefferson, UG-IT 2022-2026 Batch won the Second prize in a programming competition called "Relay in Reverse" organized by SSN College of Engineering on 06.10.2023.

9. Mr. S.Sujay Samuel & Mr. R.Samuel, UG-ECE 2020-2024 Batch won the First place in the VSDOpen2023 RISC-V Product Development Hackathon conducted by Digital India RISC-V, Krypton Solutions, and VLSI System Design (VSD) held at Dayananda Sagar University, Bangalore during October 11-13, 2023.

10. Mr. R. Sreeram, UG-ECE 2022-2026 Batch was a core member in the Innovation and electronics subsystem of Apex racing team, representing college in the Indian Karting Race 2023 which was held in Galgotias University, Greater Noida (UP) and Buddh International Circuit during October 12-16, 2023.

11. Mr. S. Harshavardan, UG-ECE 2022-2026 Batch successfully qualified for Round 2 of Meta Hackercup and ranked 2442 out of 6193 people organized by Facebook on 21.10.2023.

12. Ms. G. Gracia, Mr. K. S. Mohith Kishore, UG-ECE 2022-2026 Batch has successfully completed “Makerspace - A schematic and PCB design workshop” conducted as a part of Tesla, the intra-college tech fest of Department of ECE, SSN CE on 14.09.2023.

13. Ms. G. Gracia, UG-ECE 2022-2026 Batch participated in the “AI workshop on Deep Learning for Image processing” conducted by the SSN IEEE PELS Student Chapter on 28.09.2023.

14. Mr. V. Janakiram, UG-ECE 2020-2024 Batch presented a paper titled “A Study on Passive Acoustics Monitoring of Underwater Mammals - Black Tilapia” co-authored by Mr. C. S. Akkash Anniyappaand,UG-IT 2020-2024 Batch & Dr. S. Sakthivel Murugan, ASP/ECE in the 3rd International Conference on Signal and Data Processing (ICSDP), 2023 organized by VIT Bhopal University, Madhya Pradesh during November 3-4, 2023.

15. Mr. Vineeth Roshan Premanand, UG-ECE 2022-2026 Batch got to the final round (Top 10) of the “IEEE Envision Hackathon”, organized by IEEE Computer Society Madras Branch, held at SSN College of Engineering on 16.11.2023.

16. Ms. P. Sushmithaa, UG-ECE 2021-2025 Batch won the Third place in the ACM-W National Level Woman’s Hackathon-AthenaHacks representing SSNCE with her team “HerEmpower” held at PSG College of Technology, Coimbatore during November 24-25, 2023.

EXTRA CURRICULAR ACTIVITIES

1. Mr. V. Pavan V, UG-ECE 2021-2025 batch student participated and represented Anna University in the “State Youth Festival” organized by Tamilnadu State Govt., at VIT, Chennai during August 24-28, 2023

12. Ms. R. Soundarya, UG-ECE 2020-2024 Batch and team won the winner’s trophy in Table tennis tournament (Kongu Trophy 2023) organized by Kongu Engineering College, Perundurai, Erode during September 8-11, 2023.

ALUMNI CORNER

• Ms. V. Aiswarya, Ms. Haarika Musunuru, Ms. Aishwarya, Mr. Lingeshwaran, Mr. Kamaraj, Ms. A. Jenifer Sofia, Dr. T. A. Mariya Celin, Ms. Swati Vivekananthan, Ms. V. Sruthi Keerthi visited the department on 17.06.2023 and interacted with the faculty members. They also interacted with the NBA expert committee representing the department.

• Mr. Karunadurai, Technical Architect, Continental Automotive Bangalore & Alumnus acted as an external reviewer for the Project phase - II Industry review for PG (AE & VLSI) students on 23.06.2023.

WORKSHOP AND TRAINING

1. Mr. M. Vimal Raj, RS/ECE has participated in the International Webinar on “Revitalization: Collective Action for the Ocean” organized by Underwater Acoustic Research Laboratory, Department of Electronics and Communication Engineering, Sri Sivasubramaniya Nadar College of Engineering, Chennai on 08.06.2023.

2. Ms. A. J. Bhuvaneshwari, RS/ECE attended the “ACM India Summer Schools 2023 session for the Cybersecurity for Women school in association with CISCO” during June 12-23, 2023.

3. Ms. M. Emimal, RS/ECE participated in the five days STTP on “Electronic Systems Design Using Advanced Simulation Tools” organized by the Department of Electronics and Communication Engineering, Hindustan University, Chennai from July 04-08, 2023.

4. Ms. V. Metha devi attended the Hands-on Training on “NAV Tools” organized by the Department of ECE, SSN CE on 24.07.2023.

5. Ms. T. Brundhadevi attended the Hands-on Training on “NAV Tools” organized by the Department of ECE, SSN CE on 24.07.2023.

6. Mr. B. Rajasekaran attended the Hands-on Training on “NAV Tools” organized by the Department of ECE, SSN CE on 24.07.2023.

7. Mr. M. Anand attended the Hands-on Training on “NAV Tools” organized by the Department of ECE, SSN CE on 24.07.2023.

8. Ms. K. Narmatha attended the Hands-on Training on “NAV Tools” organized by the Department of ECE, SSN CE on 24.07.2023.

9. Ms. K. Narmatha attended the five days Internship programme in “Embedded & IoT Application using Arduino & Node MCU” by Marcello Tech from 04.07.2023 to 08.07.2023.

10. Mr. D. Sundaravadivel attended a two-day Workshop on “Introduction to MATLAB and Simulink for Artificial Intelligence with Low - Cost Hardware Interfacing” during August 22-23, 2023.

11. Mr. S. Murugan attended a two-day Workshop on “Introduction to MATLAB and Simulink for Artificial Intelligence with Low - Cost Hardware Interfacing” during August 22-23, 2023.

12. Ms. K. Narmatha attended a two-day Workshop on “Introduction to MATLAB and Simulink for Artificial Intelligence with Low - Cost Hardware Interfacing” during August 22-23, 2023.

13. Ms. K. Narmatha attended the 30 Days Master Class on “Internet of Things” at Pantech eLearning Pvt Ltd, Chennai from 12.07.2023 to 12.08.2023.

14. Mr. M. Vimal Raj, RS/ECE, participated in the online WGCapD Webinar Series on “Geoprocessing using Python”. The webinar was conducted by Indian Institute of Remote Sensing (IIRS), ISRO, during July 17-28, 2023.

15. Mr. M. Vimal Raj, RS/ECE, participated in the online training programme on “Overview of Space Science” conducted by ISRO, during 20.07.2023 to 07.08.2023.

16. Mr. M. Vimal Raj, RS/ECE, participated in the training course on “Visualization of Marine Met data (using FERRET)” organized by International Training Centre for Operational Oceanography (ITCOocean) ESSO-INCOIS, Hyderabad, India, during July 24-28, 2023.

17. Mr. M. Vimal Raj, RS/ECE, participated in the online course on “Geospatial Technology for Archaeological studies” conducted by The Indian Institute of Remote Sensing (IIRS), Dehradun, during August 07-11, 2023.

18. Mr. M. Vimal Raj, RS/ECE, participated in the training course on “Oceanographic Remote Sensing: Bridging the Gap between Fundamentals and Applications” Organized by International Training Centre for Operational Oceanography (ITCOocean) ESSO-INCOIS, Hyderabad, India, during August 07-11, 2023.

19. Ms. D. Suganya, RS/ECE attended a Two-Day Workshop on “Introduction to MATLAB and Simulink for Artificial Intelligence with Low-cost Hardware Interfacing” organized by Department of ECE, SSN CE in association with MathWorks, IEEE SPS Madras Chapter & ARK Infosolutions during August 22-23, 2023.

20. Ms. A. J. Bhuvaneshwari, RS/ECE attended the five days online FDP on “Ethical Hacking Tools and Techniques” organized by Department of Information Technology, Kamaraj College of Engineering and Technology (Autonomous) from 28.08.2023 to 01.09.2023.

21. Mr. D. Sundaravadivel attended the skill upgradation Program on “Introduction to MATLAB for beginners” organized by the Department of ECE, SSN CE on 09.09.2023.

22. Ms. V. Metha Devi attended the skill upgradation Program on “Introduction to MATLAB for beginners” organized by the Department of ECE, SSN CE on 09.09.2023.

23. Mr. S. Murugan attended the skill upgradation Program on “Introduction to MATLAB for beginners” organized by the Department of ECE, SSN CE on 09.09.2023.

24. Ms. T. Brundhadevi attended the skill upgradation Program on “Introduction to MATLAB for beginners” organized by the Department of ECE, SSN CE on 09.09.2023.

25. Mr. S. Murugan attended the skill upgradation Program on “Introduction to MATLAB for beginners” organized by the Department of ECE, SSN CE on 09.09.2023.

26. Mr. B. Rajasekaran attended the skill upgradation Program on “Introduction to MATLAB for beginners” organized by the Department of ECE, SSN CE on 09.09.2023.

27 Ms. K. Narmatha attended the skill upgradation Program on “Introduction to MATLAB for beginners” organized by the Department of ECE, SSN CE on 09.09.2023.

28. Ms. K. Narmatha attended the one-week Internship Program in “C and C++ programming” by Marcello Tech, Trichy from 30.08.2023 to 05.09.2023.

29. Ms. K. Narmatha attended the one-week Internship Program in “Empowering the future: Embedded IOT solutions for a connected word” by Marcello Tech, Trichy from 14.09.2023 to 20.09.2023.

30. Ms. K Vijayalakshmi, RS/ECE, Ms. K. K. Mythili, RS/ECE, Ms. A. J. Bhuvaneshwari, RS/ECE participated in Researcher Academy on Campus titled “Navigating the pathways of publishing in High-quality journals” at Sri Sivasubramaniya Nadar College of Engineering, on 09.10.2023.

31. Mr. D. Sundaravadivel attended the workshop on “Building a Simple IOT System” organized by the Department of ECE, SSN CE on 14.10.2023.

32. Ms. V. Metha Devi attended the workshop on “Building a Simple IOT System” organized by the Department of ECE, SSN CE on 14.10.2023.

33. Mr. S. Murugan attended the workshop on “Building a Simple IOT System” organized by the Department of ECE, SSN CE on 14.10.2023.

34. Ms. T. Brundhadevi attended the workshop on “Building a Simple IOT System” organized by the Department of ECE, SSN CE on 14.10.2023.

35. Mr. B. Rajasekaran attended the workshop on “Building a Simple IOT System” organized by the Department of ECE, SSN CE on 14.10.2023.

36. Mr. M. Anand attended the workshop on “Building a Simple IOT System” organized by the Department of ECE, SSN CE on 14.10.2023.

37. Ms. K. Narmatha attended the workshop on “Building a Simple IOT System” organized by the Department of ECE, SSN CE on 14.10.2023.

38. Ms. K. Narmatha attended the workshop in “IOT and Machine Learning application using Raspberry Pi” organized by Marcello Tech on 15.10.2023.

39. Ms. O. Kavitha attended the workshop on “Building a Simple IOT System” organized by the Department of ECE, SSN CE on 14.10.2023.

40. Mr. D. Sundaravadivel attended the Two-Day Workshop on “Maintenance Testing & Usage of Electronic & Measuring Instruments, machines & computers” conducted by the CFPD at MIT Anna University on 03.11.2023 & 04.11.2023.

41. Ms. T. Brundhadevi attended the webinar “Python Programming” by Pantech e Learning Pvt Ltd, Chennai from 25.10.2023 to 14.11.2023.

42. Ms. K. Narmatha attended the One Week Internship Programme in “IoT Real time applications using Node MCU” organized by Marcello Tech during November 15-21, 2023.

43. Ms. K. Narmatha attended the 21 days Master Class on “Python Programming” organized by Pantech e Learning Pvt Ltd, Chennai from 25.10.2023 to 14.11.2023.

44. Ms. K. K. Mythili, RS/ECE participated in the Training Program on Spectroscopy and Instrumentation Techniques SIT-2023 Series-I organized by Centre for Nanoscience and Nanotechnology, Sathyabama Institute of Science and Technology, Chennai on 06.11.2023.

45. Ms. K. K. Mythili, RS/ECE participated in the Training Program on Spectroscopy and Instrumentation Techniques SIT-2023 Series-I organized by Centre for Nanoscience and Nanotechnology, Sathyabama Institute of Science and Technology, Chennai on 06.11.2023.

CLUB REPORT

AECE

The organizing committee

Relay Resonance:

The AECE organized Relay Resonance as part of TESLA' 23 on 14th September 2023, attracting over 35 teams. The objective of the event was to test participants' electronics skills while creating an enjoyable and competitive atmosphere. It consisted of two rounds – the first round was a pen-and-paper test on electronics-related topics. Participants were shortlisted for the second round based on their scores. The second round was a relay race, where participants engaged in electronics-related questions, passing the baton upon correct answers. The event not only tested technical knowledge and quick thinking but also promoted teamwork and communication among participants as they collaborated to solve problems under time pressure. their academic learnings. The winning team - Johann Sylvester J, Karun Pias Aro S, Indhra SS from ECE were awarded Rs. 1000, while the runner – up team – Pravin R L, Vishnu Varthan, Mokinth Ram received Rs. 500.

INVENTE'23

NON TECH EVENTS

Escape Plan:

Escape Plan, a non-tech event sponsored by MAX, CWE, and DSM Soft was held on 6th October 2023. It hosted 60+ teams in batches of 6-7 teams with 3-4 members each. Designed for movie lovers looking for a good time, the event aimed to be a fun experience. The event comprised two rounds: a picture quiz in the preliminary round and a escape room challenge for the top 8 teams in the final round. Both the preliminary round and final round comprised of questions and clues based on movies. Winners and runners-up received cash prizes of Rs. 1500 and Rs. 1000, respectively. Overall, Escape Plan combined movie-themed fun with a bit of brain-teasing excitement for everyone involved.

IPL Auction:

The AECE conducted the IPL Auction on 7th October 2023. It was a non-tech event sponsored by MAX, CWE, and LANCER LASER King, attracting 60+ teams with 2-3 participants per team. The event consisted of two rounds, with the first round featuring 25 cricket and IPL-related questions. The top 6 teams advanced to the finals, where they managed a virtual purse of 80 crores to build a team. They participated in an auction for each player. Even participants who didn't qualify for the second round were enthusiastic about the auction and stayed to watch. The top 2 teams were awarded Rs. 1500 and Rs. 1000, respectively

TECH EVENTS

Enigma:

Enigma, a technical event conducted by AECE, hosted 45+ teams with 2–3 members each on 7th October 2023. The event's objective was to engage puzzle lovers in an intellectually stimulating experience with two rounds. The first round featured an MCQ quiz covering various topics such as logical reasoning. Teams with high scores were shortlisted for the second round. In the second round, the teams had to decipher text from the Enigma Machine. The winning team, headed by Avinash P from SVCE received Rs. 2500, while the runner-up team, headed by M. R. Haridharan from SVCE received Rs. 1500.

Make-a-thon:

The AECE organized Make-a-thon on October 6, 2023, attracting 35+ teams, each with 2 members. The objective of the event was to allow participants to showcase their coding skills while making things enjoyable. The event comprised two rounds, with the first round being a quiz on basic programming concepts. Teams were scored out of 10, and the top 6 teams were selected for the second round. In the second round, participants bid for preferred problem statements using the credits obtained in the first round. Participants found the idea of bidding for problem statements new and mentioned that it added a fair and fun element to the event. Participants coded their solutions in C/C++/Python. The codes of the teams were evaluated based on fixed criteria, and the top three teams headed by S. Jayakeerthaa of RMD Engineering College, S. Mohamed Saajid from St.Joseph's Engineering College and Suraj P from SSN College of Engineering were awarded sums of

Trump the Aces:

Trump the Aces was a technical event that hosted 25+ teams, each consisting of 2-3 participants, on 6th October 2023. The event was open to students from the disciplines of BME, ECE, EEE, and M.E in the Circuit/Communication stream.It was conducted in 2 rounds. In the first round, a technical quiz was conducted covering topics such as Analog and Digital Electronics, Digital Signal Processing, etc. Teams were shortlisted for the second round based on their scores. In the second round, each team received a total of 7 cards, each containing a specific component. A list containing all possible circuits or connections that could be made with the given components was provided. The cards were passed among teams, and the first team to identify and complete the circuit was considered the winner.

The first place team was headed by Varsha Solachi from Meenakshi Sundararajan Engineering College and was awarded Rs. 3000. The second place team was headed by Sandeep S from Easwari Engineering College and was awarded Rs. 2000. The third place team was headed by Jayachandar P from Meenakshi Sundararajan Engineering College and was awarded Rs.1000.

Solder It:

Solder-It, conducted by AECE, attracted 25+ teams, each comprising 2–3 members on 7th October 2023. The competition consisted of two rounds. The first round was a pen-and-paper test with 15 questions covering topics such as Semiconductor Devices, Analog Electronic Circuits, and Digital Electronics. Teams with the highest scores in the first round were shortlisted for the second round.

In the second round, each shortlisted team received a circuit description that had to be solved, and they were required to solder the components according to the inferred circuit layout. The teams were evaluated based on how well they soldered and implemented the circuit. The top three teams headed by Jayachandhar P from Meenakshi Sundararajan Engineering College, Dhivya Shree E from Sri Venkateshwara College of Engineering, Fadhil Syed Kader from SSNCE received Rs. 3000, Rs. 2000, and Rs. 1000, respectively.

Pitch it Please:

The AECE organized Pitch it Please, a technical event that attracted over 25 teams. The primary objective of the event was to improve participants' skills in succinctly communicating and persuasively pitching a product, solution, or service.

Pitch it Please consisted of three rounds – the first round was a questionnaire that tested the team's ability to solve current marketing strategies. Around 10–15 teams were shortlisted for the second round, where they were given a case study and prompted to answer questions on sales strategies. Teams were shortlisted for the third round based not only on the creativity and feasibility of their ideas but also on how they planned to implement them. In the third round, participants were given a list of topics related to the domain and were asked to come up with a product that aligns with the domain, which they would later pitch to the panel of judges. The winning team headed by R Kaveri from Meenakshi Sundararajan Engineering College was awarded Rs. 2500, and the runner-up team headed by Fadhil Syed Kader from SSN College of Engineering was awarded Rs. 1500.

- Gowshika J
II year, ECE-A

SSN IEEE ComSoc

The primary goal of the IEEE ComSoc student chapter is to educate students about various advancements in networking and communication technologies through conferences, workshops, seminars, competitions, and much more. ComSoc gives students a unique opportunity to network professionally, interact, as well as participate in technical activities all of which are essential for their academic growth.

TESLA

IEEE ComSoc organized Mock Placements and T1C T0C as a part of TESLA, the intra-college tech-fest hosted by the ECE department.

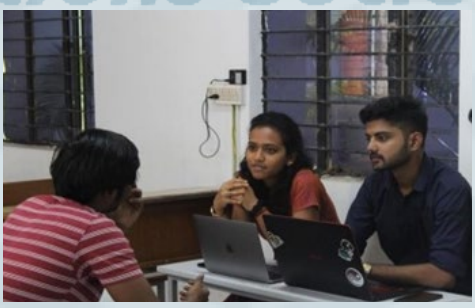
MOCK PLACEMENTS

It was a two-round event with the inclusion of the IT domain, with 22 teams participating across all departments.

The first round was a Tech Assessment round designed to evaluate their aptitude, technical proficiency, and problem-solving skills. 10 aptitude questions, 20 technical questions, and a challenging algorithm were crafted to qualify the best participants for the final round.

The second and final stage was the Technical and HR Interview. Here the candidates were allowed to display their technical expertise and demonstrate their suitability for the job.

The event had an overall prize pool of Rs 1500, as Rs 1000 for the Winner, and Rs 500 for the Runners up.



T1C T0C

This was a two-round event that comprehended Boolean algebra, Pseudocodes, Logical Thinking, Basic Electrical Engineering, Circuits, and Electronic Devices. Around 42 teams with 108 students across all departments participated in it.

The first round was a paper-pen test and the teams with the highest scores qualified for the next round. The final round was a time-based quiz, wherein the teams were required to solve the most number of questions within the stipulated time. According to the varying difficulty of the questions, the scores were awarded.

The team with the maximum was declared the winner with a cash prize of Rs 1000, and the runner-up was awarded a sum of Rs 500.


INVENTE'23

TEMPORA

Tempora is a complex puzzle contest full of intricate riddles and puzzles that will make your head spin! The goal is, as you take on each task, rise to the top of the scoreboard, and establish yourself as the greatest problem-solving maestro to hit the jackpot!

It was a two-round event, with a duration of 30 and 60 minutes respectively.

Round 1 is where the Textbook meets Technology as a potpourri of puzzles. The puzzle will revolve around the Evolution of Technology. In this round, the teams were expected to answer a set of puzzles in the form of crosswords, rebus, riddles, etc within the stipulated time. The top 6 teams were qualified for the final round, based on their number of priority questions answered and overall scores.

Round 2 is where the team's luck gets to play a card! A decade wheel was spun to decide which decades of technology they would be questioned on. The top 3 teams were selected based on their overall scores, where the winner gets a prize of Rs 3000, with the runner-up followed by a sum of Rs 2000, and the second runner-up with a sum of Rs 1000.

HEXATHLON

Hexathlon embarks on a journey that tests your circuit knowledge and coding skills spanning 6 exciting domains such as programming, electronic devices and circuits, digital system design, network analysis, digital communication, microprocessors, and microcontrollers.

It was a two-round event with a duration of 30 and 120 minutes respectively.

Round 1 was an offline paper-pen quiz based on the six domains. Based on the speed and accuracy of the problem-solving ability, teams were shortlisted for the final round.

In the final round, the teams were provided with a unique task sheet with questions under varied difficulty levels. The teams were given a choice to ask for hints, to solve the problem but only with a deduction from their score. Optimizing your code and showcasing your problem-solving skills were the primary goals of the event.

Around 25 teams, with 66 participants from 11 different colleges participated in Hexathlon'23 with a prize pool of Rs 6000. The winners Dazle RA Roger and S Bernish Daniel from Loyola ICAM received a cash prize of Rs 3000, with the runner-up Ashok Chander S and Jayachandar P, from Meenakshi Sundareshwarar College followed by a sum of RS 2000, and the second runner-up Vinsiha R, S Dharshne and Veena S, from MIT with a sum of Rs 1000.

PAPER PRESENTATION

This event focuses on the research and paper presentation skills of the participants, aiming to encourage innovation and excellence in the field of academic paper presentations.

It was a two-round event with a substantial prize pool of Rs 18,000.

The event commenced with Abstract Submission as the first round, where the participants were allowed to introduce their research and provide a glimpse of the insights and findings presented in their papers.

Among the 30 teams, with 69 participants, 8 teams were shortlisted based on their exceptional paper works. The second round was an In-person presentation round where the shortlisted teams were allowed to present their research paper and explain their research findings, methodologies, and outcomes with a time limit of 7 minutes.

The content, novelty of the research paper, format followed, scope of work, and research design presented in the abstracts were the key criteria for selection. This comprehensive evaluation process aimed to identify teams that excelled in their research as well as their ability to convey their findings effectively. The teams with the maximum scores were declared the winners.

The winner received a cash prize of Rs 8000, with the runner-up followed by a sum of Rs 6000, and the second runner-up with a sum of Rs 4000.

IEEE DAY

As a part of IEEE Day on the 26th of October, IEEE ComSoc organized a Treasure Hunt event- The Great Treasure Expedition with around 43 participants. With SSNCE and SNU as the location, clues were placed in various areas across the campus where the participants engaged in a quest for the series of cryptic clues spanning various formats, including Morse Code messages, and cryptic spectrograms. The prize pool was Rs 2000 to the top three teams as follows:

First Place: Mr. Harshan, Mr. Vishal

Second Place: Mr. Prahalad, Ms. Priyadarshini
Third Place: Mr. Naresh, Mr. Natarajan, Mr. Rajesh
- Lashika NB, 2nd year, ECE B

- Lashika N B
II year, ECE-A

Tech Club

Tesla'23

Date: 14th September, 2023

Heading two highly popular events with the right balance of skill development and readiness, Mock Placements with a focus on core, and Makerspace, a PCB Design Workshop were the highlights of Tesla'23.

Mock Placements

The mock placement was conducted in conjunction with AECE and IEEE ComSoc. The participants had the choice among three domains - Core, Management, and IT. It provided a highly specialized platform that mirrored its professional version. Comprising of three intense rounds, namely: The Aptitude round, where participants had to give their best solutions for the set questionnaire under a time limit of 20 minutes. Next came the Group Discussion round, the selected students were allocated batches and given topics to shine light on, bringing forth

their way of thinking and problem solving with a focus on efficiency. The finalizer to this was the Technical Interview, the finalists had an in-person interview with a panel that modelled their approach on industrial talent hunters, looking past the resume and doing so with well rounded questions, prompting suggestions, testing wit, application, background and quick-thinking.

Winners:
Core– Jeevaharini.K.B, ECE– 1st, Bagavathi Sathya Narayanan, ECE– 2nd.
Winners were awarded a total sum of Rs. 1000 And the Runners were awarded a sum of Rs. 500.

Makerspace

Not to be confused with any ordinary Schematic and PCB Design Workshop, Makerspace hosted ECE Gokhulesh V, Associate Engineer at Bharat Foxconn who had come for the day to head two sessions with hands-on design of PCBs. Working with KiCad and similar softwares participants had exciting topics to work on and implement.

Invente

Date: 6th October, 2023 & 7th October, 2023

Hackinfinity

Tech Club's flagship event Hackinfinity had been eagerly awaited by the technical enthusiasts that took pride in their thought-out solutions to modern problems. Pitching their ideas, keeping track of the team's progress, keeping a healthy balance of development, feasibility and possible production and more in under 24 hours was what the participating teams had to focus on. This year's hackathon had projects in the domains of Healthcare Technology, Fintech, Renewable

Energy and Sustainability, Smart Cities and Infrastructure, Supply Chain and Logistics, Education Technology and Agritech. The event's sponsors were DSM Soft, Max0 and Logistics Analytics.

Winners:
1st – Team Zhagaram
College: Sri Sai Ram Engineering College

2nd – Team Ethic Electronics
College: Adhi College of Engineering and Technology

3rd – Team Little B01S
College: CEG Anna University – Guindy

Genesis

The official ice-breaker session of Zenith conducted on 13th October, 2023 hopeful members got an exclusive introduction into the running of Tech Club. A chance to meet the domain crew of core topics like, Machine Learning and Signal Processing, Internet of Things, VLSI, Robotics, Web Development, Antenna design and explore the possibilities studying ECE gives them, this session set off the future Zenith sessions on a high note.

Zenith Session

Ending the week by diving into interesting waters, like those conducted during Zenith session meant ending the week with new ideas forming and waiting to be given shape. Interactive sessions held regularly, on the various domains of Tech Club help students gain perspective and encourage them to question how everything works. Machine Learning and Signal Processing, Internet of Things, VLSI, Robotics, Web Development and Antenna design conducted these repeating sessions for the sole benefit of the attendees.

- Dhivya Jha
II year, ECE-A

GADGETS AND GIZMOS

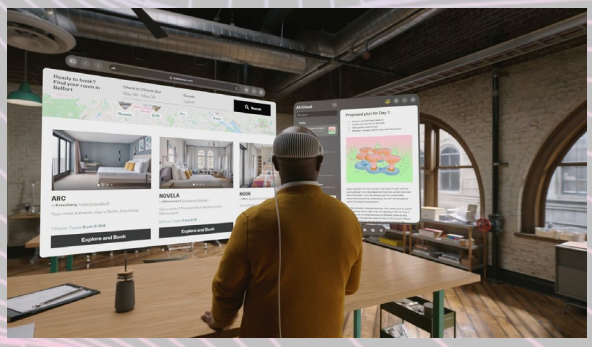
APPLE VISION PRO

16 years ago, Apple introduced the iPhone. Dubbed 'revolutionary' by its visionary founder Steve Jobs, it became the moment that ushered in the era of the smartphone. In these 16 years, the smartphone has become one of the most ubiquitous technological marvels in human existence. One simply cannot imagine a life without the smartphone. Today smartphone capabilities have progressed to such a level that there are real discussions regarding the prospect of these mobile devices replacing the humble and trusty laptops of yesteryear. One would only expect smartphones to increase in importance as our generation firmly steps into the digital age. Or perhaps … could there be something unexpected lurking around the corner?

Enter the Apple Vision Pro, an upcoming mixed-reality headset by Apple. What exactly is this headset all about? The word mixed reality may point our attention in the direction of virtual and augmented reality. Indeed, the Apple Vision Pro is in a sense an AR headset, but it goes above and beyond. Think about your average digital workspace. A laptop and a monitor and a speaker setup. You are limited by the size of the screens in front of you. What Apple claims the Vision Pro can do for you is transform your entire living space into a screen for you. Simply affix the Vision Pro onto your head and through two small very high-resolution screens placed right in front of the eyes, the world around you will be transformed into your digital workspace.

Apple promises a seamless experience through their newest operating system, the Vision OS which they tout as providing a new level of immersion through 'spatial computing' – the idea that digital content can take form in the physical space around a person rather than being restricted to the confines of displays. You can access the interfaces of all your apps as they float about in the air around you. Looking at these screens can be carried out simply by moving your head around and you can also place them anywhere in your living space. Gesturing with fingers and using your voice are two ways in which you can interact with the apps, the former being touted as a straightforward experience with no unnecessary gimmicks for maximum comfort. What about watching films? Why not transport yourself to a serene nighttime landscape with a lake and a mountain in the backdrop while a dazzling screen hovers about in mid-air with your favourite film playing? And for taking photos you will no longer have to pull out your phone and peer through a tiny screen. You can select to capture moments right as you experience them through the screen of the headset.

How does the Apple Vision Pro do this? Incredibly, Apple has managed to cram every bit of the most advanced consumer grade tech into its aluminium and glass chassis. It is powered by not one but two chips, the M2 chips found in the MacBooks as well as a purpose built R1 chip for processing the deluge of real-time data streaming in from its vast array of sensors. Which brings us to the heart of the Apple Vision Pro. It is made what it is by the array of sensors and cameras that it has been endowed with. The sensors allow the Vision Pro to recreate the external world exactly as our eyes would see it with screens that have the resolution that is 6 times that of the most modern iPhones on the market. 6 times! And there is one screen for each of the eyes. Special LiDAR sensors on the Vision Pro help in adding a sense of depth to the image so it no longer feels 2D. It is also expected that the Vision Pro will be launched with cameras for 3D imaging.



This tech is truly marvellous. The Apple Vision Pro seems like it is straight out of a science fiction film. Indeed, the appeal lies in it being unlike any other digital experience that we have had so far. Yes, VR gaming headsets have come close in a sense, providing us with the opportunity to feel immerse din the world of a game but surely, nothing can come close to the idea that the Apple Vision Pro is seeming to advocate.

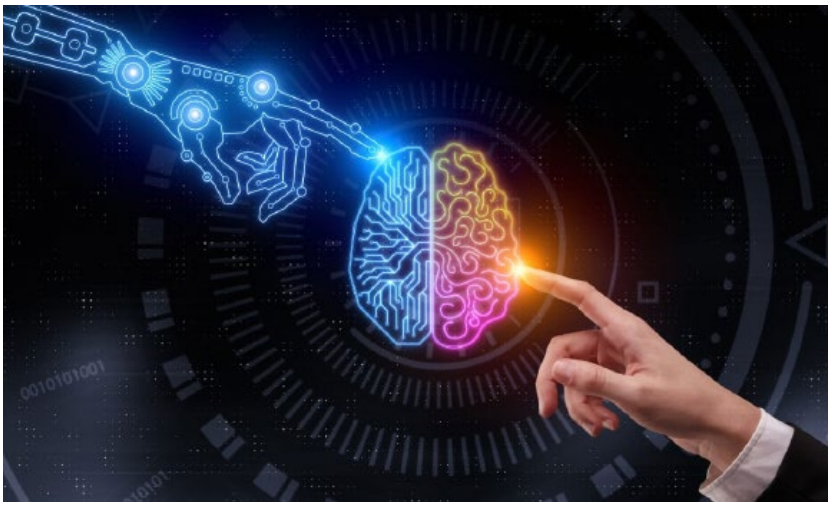
There are certain issues with the concept of the Apple Vision Pro though, however. Humans are social animals, and we yearn to feel connected to each other. One way in which we express endearment and affection is through facial expressions and eye contact. A large headset mounted on the face of a person, however beautifully crafted, is bound to feel out of place and make conversations more awkward. Yes, Apple has tried to mitigate this issue by including a feature where the eyes of the person are displayed just as they are to the outside world through a screen on the exterior. But it is undeniable that the solution seems rudimentary at best to the question of 'How do we make this change invisible?'

All said and done, it is nevertheless important to acknowledge the fact that the Apple Vision Pro could potentially herald our entry into a new era – an era where laptops and smartphones slowly fade away into oblivion as the idea of an infinite digital canvas takes hold of the collective public imagination. Apple may have jumped the ball with this endeavour. We will not know the true impact of their pioneering efforts until after a few years. Nevertheless, the lessons learnt from this experiment will certainly apply to the future of our digital experiences and serve to hopefully make this world a better place.

- Johann Sylvester J
II Year, ECE-A,

NAVIGATING THE AI LANDSCAPE: TOOLS, HARDWARE AND ETHICAL CONSIDERATIONS

I'm sure by now you've all not only heard of AI, but also learnt what it is in some capacity. Some of you might have even learnt about the fundamentals of building your own models. You might have used it to generate your assignments, or you might have messed around with it for fun. And that's all great. AI, due to its currently impressive implementations and very promising potential, is one of the most rapidly adopted bits of technology ever in human history. The more I think about it, the more I liken the invention of AI to that of gunpowder. And why not? Think of all the things that gunpowder made possible like fireworks, dynamite… and guns. Point is, it can be used to make powerful tools as well as dangerous tools. We're still very early into the life of AI and there's a lot of things for us to think about such as where and how its used, how it works, societal influence, the legalities and much more. I'll try to cover as much ground as I can on all angles, though keep in mind that there is so much more depth to it than a few paragraphs could ever cover.



AI is closely related to the field of machine learning, and so a lot of studies made so far have been made in recent times. Many of these studies used to be more mathematically inclined due to the origins of machine learning as a mathematical tool used for playing games like chess and checkers. Research was still limited to niche applications at the time due to the massive computational power required for training. Around the early 2000s, as computers began getting significantly more powerful, machine learning was used to develop path finding techniques as well as a variety of sophisticated algorithms that were never before possible. It took us from making bots for checkers, to making early forms of self-driving and navigation, to speech-to-text and advanced searching algorithms. More importantly, this also lead to the development of tools that are immensely helpful for quickly developing and implementing new algorithms.

The biggest tool to have come out so far might just be python and its variety of libraries like Scikit Learn and TensorFlow. TensorFlow in particular is an interesting library as it was purpose built by Google to help them with the research and development of their AI and ML software. They later made it open source and multi-platform. But of course, python code isn't really the fastest, its used to build quick prototypes and is generally preferred by companies and institutions due to its easy learning curve amongst those unfamiliar with programming. These aren't the only tools that AI

relies on these days. Ever heard of Nvidia Cuda? It's a bit of technology made by Nvidia which is incorporated into their GPUs. By using their framework, one can significantly speed up their code using hardware acceleration. The catch is that you must use Nvidia's hardware to utilize this. And there is a fun story to be told here. When Nvidia developed Cuda, they frequently sponsored many universities and institutions in an attempt to get researchers and academics into their ecosystem. This was a very successful campaign and has lead to the dominance of Nvidia and their proprietary frameworks in the GPU space. This actually quite neatly segues us to the importance of hardware in the ongoing AI craze.

I mentioned earlier that Python was a powerful yet slow tool for AI development. Lets say we instead programmed everything in something like Java, would that fix the performance issues we face? It would be an improvement, but its still not good enough. The basic operations performed by any machine learning model are, by default, quite complex. And these operations are performed many hundreds if not thousands of times. Some of these operations would include matrix multiplications, Fourier Transforms, Cosine Transforms and Convolutions. And for companies like OpenAI, Google and Microsoft, that simply isn't going to work. Which is why pretty much every major tech company employs some form of hardware acceleration for machine learning. Apple does it in their M series of processors using what they call the Neural Engine; Google does it with their Tensor Processing Unit; Amazon has their Graviton and Inferentia chips and Microsoft has recently developed their own chips named Maia and Cobalt. Regardless of what every company calls their fancy hardware, they are all very similar in what they do; they have dedicated parts for performing these complex operations very efficiently. And these aren't used on a small scale, they're deployed in bulk in massive servers.

The funny thing though, is that nobody really knows anything about the actual hardware of these custom designs. Usually, people would be able to make an educated guess about how it all works at a hardware level even if they can't quite figure out the architecture itself. The reason nobody has been able to do so is because every company is investing heavily into this technology despite how new the concept is. There isn't much information out there for people to work with so these companies are essentially building everything from scratch and are in relatively new territory. Put simply, we're not done developing this technology and it will be many years before its mature. And because of the rapidly and drastically changing nature of AI, its not surprise the hardware too is follows the same trend. That's why everything is abstracted for the end user; so that any drastic changes made in the hardware won't have an impact on the tools that people currently used to make AI.

So why is every company investing this heavily on both hardware and software for making and deploying AI? Nobody really knows what AI will look like in 10 or 20 years; and no one knows how it would change things. What we do know is that if AI turns out to be as promising as we currently make it to be, then it would be stupid to not be the dominating party once AI has matured, which is what every company is betting on right now. It is also why many countries are actively working on laws that would control AI and how disruptive it is. Disruptive is seems like an apt word as AI art and text is flooding the internet and is getting to the point where one wouldn't know the difference between AI generated content and actually truthful information. It is also being used to take over creative roles like writing, voice acting, drawing and animating; this has lead to writers and actors in the US going on strike. Controlling how AI is used was the primary goal of the EU's latest regulations as it clamped down on biometric identification systems, social scoring systems, generative content and much more. This should hopefully be enough to paint a bigger picture to you what AI is like and the various nuances behind its current development.

- Shridhar Sriram
IV year, ECE-B

SMART INDIA HACKATHON

A few months back our college was bustling with activity when the Smart India Hackathon-2023 edition took place. Countless teams showcased their ingenuity, presenting solutions and pioneering ideas to various interview panels. Let us delve into interview of one such standout participant, Thenmozhi J, whose team progressed to the subsequent rounds and emerged victorious, claiming one of the special prizes at the National Grand Finals for their proposed innovation under their chosen Problem Statement.

What was the problem statement you chose and why did you choose that?

When my team leader first approached me, she already had a proposal in mind with respect to the agricultural domain. Hence, we did not have to spend much time choosing our problem statement since all the team members were in agreement to move forward with this idea. So, instead of looking for a problem to solve we looked for a problem that could be solved by our existing solution. We moved backwards and pored through the problem statements and finally decided to propose our idea under the Student Innovation-Software problem statement. This gave our team the freedom to think out of the box and develop our concept according to our unique vision.

Who were your team members and mentor and what was your innovation?

My team leader was Apurva Narayan (CSE), and my other teammates were Olirva M (CSE), Rupam Banik (IT), Keerthan Vinod (CSE), and Karthik Vijayakumar (CSE). Our academic mentor was Dr. Chitra Babu, and our industrial mentor was Kiran R, from Presidio.

We developed a blockchain-based traceability system for the supply chain, specifically designed to efficiently handle surplus agricultural raw materials. Each of us had our own specialities and that's how we collectively worked on the idea to develop a working prototype. Rupam was really good at UI/UX and that was his forte. Apurva and Olirva worked on the ML model while Keerthan and I focussed on the Blockchain aspects of the innovation with Karthik working on the app development. More than the technical implementation, I believe we spent a lot more time ideating and fixing the loopholes in our idea because, at the end of the day, the idea needs to be practical and implementable. If you get that right, you can build a prototype in like a day or two.

A special shoutout to Apurva here because before we went to the finals at the nodal center, there was so much paperwork and logistics to be done, but we never had to worry about all of those things since she took care of all of that on her own, ensuring that the rest of us could concentrate on refining the project.

What were the challenges that you faced at each stage?

One of the biggest hurdles we encountered was on the day of the finals, where we had to scrap our original idea and brainstorm a completely new one from scratch. Picture this: three months of hard work, a fully functioning prototype, and then, during our first session with the judges, bam! They

weren't convinced about the practicality of our concept and were sceptical about how we would convince the farmers to use a high-tech app like ours. We truly believed in our initial idea, but due to time constraints, we couldn't address the major issues the judges were pointing out and persuade them that this idea was worth pursuing. So, we had no choice but to come up with a new idea from the beginning, and it was quite disheartening to discard all the efforts we had put into that idea and start from square one. I think in moments like that, it's very easy to panic, but what's important to remember is that this is what hackathons are all about – they test your quick problem-solving skills, your ability to execute ideas swiftly, and above all, your grit to keep going till the very end

What was unique about your solution or the 'edge' that allowed you to win SIH?

The judges expected a fully integrated working solution within 36 hours, rather than scattered pieces of code. Initially, our backend was functional, but the different modules worked independently. The ML model was in Colab, the blockchain was on my local system, a local database was in Excel, and the frontend of the app worked separately. However, the judges wanted us to integrate everything, connect to the cloud, and present a marketable product during the final review. To meet their expectations, we connected the frontend and backend, integrated all components with AWS, and demonstrated a seamless workflow. I believe that successfully implementing the cloud component gave us a competitive advantage over other teams.

The winning moment. How did it feel?

It was very unexpected because, by the final presentation, we were pretty sure we were not getting the first place. It was not because our product was not good enough, but rather one of our opponent team's product was so good that if they made some minor iterations, they could market it in another week. They had been working on that project for a long time. One more advantage they had over us was that theirs was a core Blockchain product, while ours was a mix of agriculture and blockchain with a slightly greater emphasis on agriculture, since we had originally intended to submit the idea under the agriculture domain. As expected, when the prizes were announced, that team bagged the first place for our Problem statement, and at that moment, I couldn't even look at my teammates' faces. But in another 45 seconds, they announced that one team per nodal centre would get a special prize under the AWS category, and our team was announced as the winners for that. It was a very surreal moment. We felt the disappointment of defeat and the joy of victory all within a span of minutes, and we have our mentors to thank for this achievement, who guided us throughout those gruelling 36 hours.

How was the experience of participating at a National Level Competition and What were your main takeaways?

It was an amazing experience. We learned a great deal during those two days. My biggest takeaway was the realisation of how much can be accomplished in a day when we come together to discuss, deliberate, and work on solving the problems that we deeply care about. It was truly inspiring to witness the motivation and enthusiasm of the other teams. I vividly remember seeing some teams working non-stop for the entire 36 hours, and I couldn't help but think, "Wow, how dedicated must they be to a project to endure such intense commitment?"

I was accustomed to working alone and dealing with my own procrastination and unnecessary delays. So, it felt like magic when, as a team, we were able to get stuff done so much faster. Sometimes, you may think you have thoroughly analyzed a problem until you present it to someone

else and they point out an issue you hadn't considered before. That's when you realize how narrow your perspectives were. And that's the biggest advantage of working in a collaborative environment with so many different inputs and perspectives; it inevitably leads to something meaningful.

Are you planning to continue working on this project? If so, What are your future plans regarding the same?

Yes, we are planning to propose this project to SSN iFound. Additionally, we intend to write a paper on the approach we have devised.

What would be your advice for juniors who would like to take part in future editions of SIH?

Please focus on refining your idea and ensuring it is well thought out. Consider all possible loopholes and objectively analyse it from the perspective of your target audience. Additionally, have a few backup ideas in case the jury requests major changes or a completely different implementation than what you initially submitted.

While it is important to arrive at the hackathon with a fully functional prototype, keep in mind that the judges will likely have suggestions during each review. Be prepared to implement those changes and have them ready for the next review. It's an iterative process, so be prepared for anything.

Furthermore, equip yourself with a strong knowledge of relevant tech stacks, especially if you plan to participate in the software edition. This includes areas such as app development and UI/UX design. No matter how innovative your idea is, presentation and user-friendliness are crucial.

Lastly, learn how to deliver an effective elevator pitch. Ultimately, the practicality and simplicity of your product are the jury's main expectations. It is essential to be able to explain and convince them of the practicality of your approach.

- Nivetha Elango
IV Year, ECE B

STUDENT STARTUP

Ever since I watched the movie “Nanban”. 2 things were clear to me, I am becoming an engineer and I have to make my learning process more engaging and fun.

I have noticed how boring educational materials can be to Students if they are especially in a very formal way and also how most of the current generation do not read Tamil articles at all.

When I saw a lack of engagement as a pressing problem, I came up with an entirely different solution that involved a lot more engineering and had a lot of technical intricacies. Taking this as the problem statement and the project I formed a team of amazing builders with whom we presented our project and our solutions to Industry veterans, we were quite delighted to know that we got 6th place out of 547 teams and 2200+ participants across India. This affirmation, along with the suggestions, made me think about the problem statement more, and that’s when I thought about the problem-solving principle “Simplicity is better than Complexity.” That’s when it struck me; students in Tamil Nadu use Tanglish in their social media, but no one has tried to use it anywhere other than “Why this Kolaveri.”

The Tanglish PRESS

Any good project starts with user research, after speaking to some of my peers from colleges across Tamil Nadu, I was confident in the plan.

Thus, The Tanglish Press was born.

Great Startups almost always have a Great Team. That is my co-founder Pranav Vikraman from RMD Engineering College.

With a very big ambition of changing how we students learn, we launched our first product, “thetanglishpress.tech,” a free weekly email newsletter on the latest tech updates with a tidbit of humor and engaging Tanglish.

It’s been just over a month since our inception, yet we have managed to get around 800+ followers across our socials and an amazing response from the community.

We have many plans for our future, especially for this new year, which we’ll continue to work on and bring a wholesome experience to every student who is like us with an attention span that’s less than a goldfish. Cheers!

- Justin Benito
II year ,ECE-B

PLACEMENTS 101

When it comes to placements, the one thing that comes to mind before the flamboyant packages are our SPCs or Student Placement Committee Members, who play a crucial role during the placement season. Well, who are the Placecomm members for our department this year?

It's Aditi Kannan and Pranav Agumbe who will act as the bridge between the CDC (Career Development Center) and students. Any information or queries related to placements can be directed towards these two amazing people, and as always, they will be more than happy to help.

Now in this short feature about Placements, written based on the information given by our SPCs, you'll get to know about the ins and outs of placements, tips and tricks to get a high CTC, how internships affect you, and the requirements for getting placed.

What Happens Before, During, and After Placements?

Placement season can be divided into 2 phases. The 1st phase is when high-value offers come knocking at your door, but then it's not a general trend; the pattern varies until the end of phase 1, Companies like Avalara will come with a CTC of 21 LPA at the very beginning, and then the highest will drop to 7 LPA for Ashok Leyland, fluctuating between 6 to a maximum of 21 LPA. It's only right to say that the competition will be fierce, and only if you have the skills, guts, and mental stability to compete with the greatest minds can you crack some really good offers. If not, wait patiently and be preparing and plotting your strategy.

Phase 2 has lesser competition when compared to the 1st one. If you didn't get an offer from Phase 1, don't worry; there's an offer that has your name on it, so don't get tensed or jump to conclusions.

The length of the placement season is indeterminate. If everyone gets placed in a batch, it will end in a few months, or else it may even stretch out to the next academic year.

Wait!! There's a Pre-Placement Talk?

The process of getting a placement in a company starts with the pre-placement talk. Attend this as if your life's on the line. It should definitely not be taken for granted. The company (recruiting team) usually gets an impression of how the students are during the pre-placement talk and as they always say, the first impression is the best impression.

How does the Placement Process go?

First of all, stick to deadlines for applications; CDC is quite strict on their deadlines, so don't lose out on opportunities because you forgot to set that reminder. Once you've applied to companies,

you will get a test link in your mail from the recruiter. Now some companies are super chill about where you attend the preliminary test, but some require you to attend it live on our college premises. Let's say you aced your test; congrats first of all. Next, you would have to attend various interviews the number totally depends on the company interviewing,but broadly it can be classified into a technical round and an HR round.

Technical Round: Depending on the type of company you have selected, if it's IT, then you must have good aptitude, reasoning, problem-solving skills in addition to languages like Java, C++, Python, OOPS, data structures, DBMS, and a little bit of Networks and Computer Organization and Architecture.

But if you have applied for Core, you have to be good with Aptitude, Reasoning, problem-solving, and must have revised all the basic concepts that you have learned throughout the semesters from circuit theory, Electronic devices, electronic circuits, microprocessors, microcontrollers, and control systems, etc.

HR Round: Now, this is where you will be assessed if you have the required attitude the company requires, the right motivation, enthusiasm, and good knowledge about the company you're sitting for the interview will get the job done.

Does Internship Play a Vital Role?

Internships definitely play a vital role in placements. Usually, people who do internships get a PPO (pre-placement offer). People with PPOs are generally less stressed as they already have an offer in their name. Even if it's not a PPO, you'll get amazing experience to add to your resume.

There's an App for that?

The Pod App is used currently for anything placement-related. CDC will send you a mail about registration, and initially, you'll have to fill up all your details. It's similar to creating a LinkedIn profile, but you'll have many more personal details involved. One piece of advice to everyone is to start applying for Aadhar and PAN Card before the placement season.

How to Get a High CTC?

First of all, if you go in the mindset of bagging only the top companies, you should be exceptional at your skills added with an insurmountable amount of luck. Otherwise, you will have a mentally taxing and exhausting life during the placements To be cool and also aim for the Highest CTC, we can exploit the CDC rules. Companies are classified based on their CTC, and if you read the placement policy, you will come to know that companies are categorized into regular, dream, super dream, and marquee offers. You can secure only 1 offer from one category. The better strategy would be to crack a regular offer and bring in more confidence. Use the smaller package companies to your advantage and leverage them in gaining interview experience. As long as you have relevant skills and confidence in presenting yourself, you're good to bag those marquee offers.

What is One Piece of Advice You'll Give Your Past Self?

Don't you dare take the "Tell me about yourself question." Like everyone else, memorizing a general perfect essay doesn't matter. It's not alone about selling yourself but about weaving an entire story together. "A funny story is that when I had attended so many interviews but never got selected into one, not even one! Even when reaching the final round, nothing could explain why I was not getting selected, but then suddenly an analytics company popped up to which I applied for which I changed my style of introduction a little bit. From just speed running my skills to actually expressing my interests in ML and analytics, I was able to make the interviewer love it." - AditiKannan

Another bit of advice from Pranav Agumbe is to not stress about it and not worry; this is a game of luck and chances. Don't ever compare yourself with others. The stars will align, and in no time, you'll be seeing yourself being handed over a placement offer. Just do your work with sincerity and dedication. Good Luck.

- Justin Benito
II year, ECE-B

CITI BANK

1. Congratulations on securing the highest package at CitiBank! What initially drew you towards a career in finance, particularly at CitiBank?

Thank you! When I started my journey in preparing for placements, my primary focus was on finding opportunities that would not only serve as a solid platform for a newcomer in the corporate world but also provide continuous learning and networking prospects. As I explored various companies, I discovered that CitiBank aligned perfectly with my career prospects and it also provides an excellent platform to build a robust professional network, gain insights into risk management and continuously learn in a dynamic and fast-paced industry. The opportunity to contribute to the intersection of technology and finance at Citi Bank is what solidified my decision to pursue a career in this field.

2. Could you share some insights into the interview process at CitiBank? What aspects of your background or experiences do you think set you apart as a candidate?

The interview process at CitiBank consisted of three comprehensive rounds. The first round was a test of our aptitude and coding skills and those who successfully navigated this round proceeded to the technical interview. During the technical interview, the questions were focused on my projects and the technical skills that were outlined in my resume. The questions were designed to gauge my relevant areas and my ability to apply theoretical knowledge to practical scenarios. The final round was the HR interview, where the emphasis shifted towards evaluating my communication skills and thought processes. This aimed to understand how effectively I could articulate my ideas and handle situational or behavioral problems. Also, each student has innate skills in his or her own field of interest and I personally believe that having hands-on experience in implementing solutions during my internships, coupled with a strong academic foundation helped me grab this opportunity.

3. What specific skills or knowledge did you acquire during your academic journey that you found most valuable during the recruitment process?

Given my interest in machine learning, I dedicated a substantial part of my academic journey to projects and courses in this field, establishing a strong foundational knowledge. Recognizing the efficiency of a strong foundation, I understood its pivotal role in navigating the recruitment process seamlessly. As an ECE student, I was not exposed to all the skills which a company like Citi might expect from the candidates so I had to prepare additionally which involved enhancing my proficiency in SQL and coding through platforms like LeetCode. Apart from this, taking mock interviews further refined my ability to articulate answers clearly and effectively which helped me a lot during the recruitment process.

4. How did you prepare for the placement process? Any particular resources, books or strategies you found exceptionally helpful?

In preparation for the placement process, I focused on my coding skills through LeetCode, concentrating on data structures and algorithms. Apart from this, I did a few courses on Machine Learning and Data Analytics since I wanted to build my basics in these areas. Hands-on coding practice and theoretical knowledge helped me a lot in clearing the technical rounds.

5. What advice would you give to other final year students aiming for similar achievements in their career pursuits, especially in the finance sector?

My advice would be to prioritize a robust understanding of fundamentals. Strengthen your basics, develop clear concepts through projects and build a detailed resume highlighting your technical skills and accomplishments. Continuously build expertise in your areas of interest, aligning your skill set with the specific job roles you aim for.

6. Could you describe a significant challenge or hurdle you faced during the recruitment process and how you overcame it?

One of the challenges I encountered was that some companies sought a strong computer science foundation which were not covered in my curriculum. Faced with competitors who had a computer science background, I had to invest additional time in learning these concepts while balancing my college academics. A bit of planning and scheduling helped me overcome this hurdle.

7. What role did internships or extracurricular activities play in shaping your career path and aiding your success in securing this position?

Both my internships not only enhanced my practical skills but also exposed me to various career options. Meeting diverse professionals during internships broadened my perspective, guiding me to discover my interests. The exposure gained contributed significantly to building strong projects and developing technical and communication skills crucial for cracking placement interviews.

8. How much did your CGPA influence your placement? Is CGPA really a concern or do recruiters mainly focus on skills?

While some companies use CGPA as a filtering criterion, others prioritize skills over academic performance. The significance of CGPA varies by company and having a reasonable CGPA broadened my eligibility for numerous opportunities. Ultimately, it is crucial to showcase a balance of both strong skills and a competitive CGPA.

9. Lastly, how do you envision your career trajectory unfolding at CitiBank, and what are your longterm professional goals within the finance industry?

As a newcomer to the corporate world at CitiBank, I anticipate a fulfilling experience characterized by continuous learning and skill development. I envision fostering a dynamic atmosphere where I can expand my network and contribute significantly. Looking ahead, I aspire to evolve into a managerial role, leveraging my acquired skills and knowledge to drive impactful initiatives.

- Sivabharathi. M
II year, ECE-B

COMCAST

SHREEVARSHINI N

What are the preparations to be made before sitting for placements? Elaborate on the eligibility, prerequisites, etc.

Talking about the preparations,

Initially, focus on maintaining a good academic score as this is often the first criterion that companies consider when shortlisting candidates. Aim for a consistently good CGPA throughout your studies.

Next, try to have a deeper knowledge of the subjects that are most relevant to the job description. Strengthen your understanding of those core concepts by completing relevant courses and certifications.

Finally, develop your problem-solving skills by practicing and solving aptitude tests. To improve your analytical and critical thinking skills try solving several coding problems in your convenient coding platforms (I used GeeksforGeeks to study relevant topics and solve coding questions and IndiaBIX for aptitude and reasoning). Also keep in mind the answers for a few basic HR questions(you can read it from Glassdoor).

Talking on eligibility,

Have a good CGPA (preferably >8.5) and no live backlogs.

Have a resume not exceeding a page as this will help you to be shortlisted easily in various rounds of the interview and your resume to contain your personal contact details, education qualification, experience (about your previous internships if any), skills and certification details.

What role were you interviewed for? How were the various rounds? Give a brief about each round and specify the nuances.

I was interviewed for Devops engineer and there were three rounds in the overall selection process starting from the online test to HR interview.

ONLINE TEST:

This round consists of 8 sections to analyze our Aptitude, Reasoning,Technical(JAVA,C++,OOPS),English skills and it was a three hour proctored test.

IN-DEPTH INTERVIEW:

This round is your chance to showcase your passion for DevOps, career goals, and understanding of the specific company culture. I was prepared for questions about my past projects,internships and, and showed them on how I stayed updated with the latest DevOps trends. I was also asked to write codes in my preferred language for 2 problems they provided on the spot, and followed up with a detailed explanation on the answer I gave for the problems, I was asked a few basic questions on data encapsulation and oops concepts.

Remember to highlight your soft skills like problem-solving, critical thinking, and adaptability and other major skills you possess which will become an add-on in making the interview panelists believe that you are the right choice for the role they are interviewing for.

HR ROUND:
This is the final round where some details about the companys' (abouts its free cash flow,history,divisions,revenue,etc)were asked. They also collected personal details and basic communication skills and presence of mind were tested.

Give your take on any specific round that intrigued you in detail.

The Technical interview round fascinated me as the interview went on with a relaxed interview environment,highlighting the kindness of the panel and the smooth flow of the interview suggests a positive and respectful atmosphere. This can reflect on the company culture and how they value candidates. Another aspect is that being able to ask questions to the panelists showed open communication and genuine interest in the role. It demonstrates my initiative and desire to learn more about the company and the position.
So minor tips I can suggest are:

- Be confident and articulate.
- Make eye contact and smile.
- Listen carefully to the question before you answer.
- Answer the question directly and concisely.
- Be prepared to provide examples to support your answers.
- Ask questions to show your interest in the company and the position.

What is your "advice" for your juniors?
I wouldn't call it advice, but a few tips I think that will help my fellow juniors are:

- To Reach out to alumni who are working in the industry you are interested in. They can provide valuable insights and advice about the placement process.
- Attend company presentations and workshops to learn about companies and their recruitment process.
- Prepare your resume and make sure your resume is well-formatted and highlights your skills and experience in a clear and concise way.
- Practice your interview skills - Mock interviews can help you feel more confident and prepared for the real thing.

What should the placement aspirants look forward to? Should they have any preconceived opinions?

It's understandable for placement aspirants to have a mix of emotions and expectations leading up to the big event in their career so there are certain things to look for: Exciting opportunities, Financial independence, Skill development and Personal growth, Networking opportunities.
Managing preconceived opinions include:

- Avoid unrealistic expectations
- Stay positive and flexible
- Focus on personal growth and
- Trust the process

Remember, a positive attitude, a willingness to learn, and a focus on personal growth will put you in the best position to succeed in your placements. So, approach the process with enthusiasm, keep an open mind, and be ready to embrace the exciting opportunities that await you.

VIJAY KRISHNA

What are the preparations to be made before sitting for placements? Elaborate on the eligibility, prerequisites, etc.

Being part of one of the circuit branches was a prerequisite. To meet this criterion, I focused on understanding core subjects . Additionally, I dedicated time to practicing coding, particularly emphasizing concepts like linked lists, trees and other basic data structures. Moreover, I made sure to highlight and articulate my relevant projects, showcasing practical application of my skills.

What role were you interviewed for? How were the various rounds? Give a brief about each round and specify the nuances.

The role I interviewed for was a technical one, and the interview process consisted of three rounds:

- **Round 1 (Technical):** This round centered around discussing my hobbies, engaging in coding exercises on linked lists, and elaborating on the projects I had undertaken.
- **Round 2 (Technical):** This stage emphasized explaining the details on my resume comprehensively. Furthermore, it involved a deeper exploration of core subjects and the rationale behind my choice to transition from a different stream to the one I was applying for.
- **Round 3 (HR):** The final round was a more general discussion focusing on understanding the job role and company culture.

Give your take on any specific round that intrigued you in detail.

The second technical round stood out to me due to the welcoming nature of the panel. They encouraged detailed explanations of my previous responses, placing emphasis on effective communication skills. Moreover, this round further delved into technical aspects, requiring a deeper understanding and explanation of the subjects discussed earlier.

What is your “advice” for your juniors?

For juniors, I'd stress the importance of authenticity in your resume. Only include details you're thoroughly familiar with and can confidently discuss during the interview. Confidence in explaining these aspects is pivotal.

What should the placement aspirants look forward to? Should they have any preconceived opinions?

To all aspirants, prep time is key. Master the technical know-how, practice coding extensively, and be ready to dive deep into your project discussions. And most importantly, exude confidence during those interviews - it truly makes a lasting impression.

MITHILA J

What are the preparations to be made before sitting for placements?

To excel in your screening tests and interviews, a comprehensive preparation strategy is essential. Begin by strengthening your foundation in higher-level aptitude, focusing on arithmetic aptitude, verbal, and logical reasoning. Familiarize yourself with the basics of programming languages like Python, C, and C++, along with a solid grasp of Object-Oriented Programming (OOPS) principles. In the realm of electronics, ensure a fundamental understanding of both Analog and Digital concepts, VLSI, and LIC for core company interviews. It is best to have a CGPA greater than 8.5.

For aptitude, leverage resources like IndiaBix, CareerRide, and Freshersworld, while platforms like Leetcode and CodeChef can hone your coding skills. Dive into programming and OOPS-based MCQs through Geeksforgeeks and Tutorialspoint. Strengthen your knowledge of Operating Systems and SQL, crucial for technical roles.

When gearing up for interviews, focus on crafting a strong introduction and be prepared to discuss the areas highlighted in your resume. During interviews, respond to questions with clarity and precision. If unsure, express your lack of knowledge honestly. Avoid providing incorrect information and maintain a confident demeanor. Keep your responses concise, without unnecessary elaboration. Remember to summarize your key skills and experiences effectively. Confidence is crucial throughout the interview process, and maintaining a balance between assertiveness and humility will leave a positive impression on the interviewer.

What role were you interviewed for? How were the various rounds?

The placement process for Comcast had two major rounds - Online MCQ and coding test and interviews. At the beginning we were told that they are gonna recruit for different positions. Online test had various sections – Aptitude – had simple problems, Coding – had simple questions based on strings and integers (where allowed to use any of the languages), MCQs - Python concepts, Java concepts, C and C++, OOPS, Linux, Unix, SQL and Testing tool. I guess we were shortlisted for the next level of interviews based on our performance in the online test.

I had four rounds of interviews. They were finding which role we would better fit into. In the first interview I was asked to introduce myself and elaborate my project works. Then in the second one, the interviewer asked me to explain my project which was based on web development and also the interviewer explained about the different roles and responsibilities. In the next one, the interviewers

asked basic questions from OOPS and Java. They asked me to write a code or pseudocode for reversing an array. The last round was a personal interview. The interviewer asked me to talk about my family and extracurriculars and hobbies. Throughout the process, the interviewers maintained a friendly and approachable demeanor.

In essence, Comcast's placement process aimed not only to assess technical proficiency but also to determine the candidates' compatibility with different roles within the company. The conversational and friendly nature of the interviews created an environment where candidates could showcase their skills and experiences while also providing insights into their personal attributes and interests.

Give your take on any specific round that intrigued you in detail.

Among the various rounds of the Comcast placement process, the technical interview round that focused on Object-Oriented Programming (OOPS) and Java concepts particularly intrigued me. This round served as a crucial evaluation of my understanding of fundamental programming principles and their ability to apply them in practical scenarios. Moreover, the second round serves as a bridge between the technical aspect of your skills and the practical application of those skills within the organizational context. Understanding the roles and responsibilities not only helps candidates align their aspirations with the company's expectations but also fosters a sense of preparedness and clarity for potential future endeavors within the organization. In essence, this round goes beyond assessing technical proficiency; it offers a holistic perspective on how your skills align with the company's goals and how you can contribute meaningfully to its objectives.

What is your “advice” for your juniors?

Cultivate a mindset of continuous learning and adaptability. Rejections and failures are part of the journey—don't let them diminish your hope or confidence. Prioritize thorough preparation, consistently giving your best effort. Focus on the process rather than worrying about the results. Understand job descriptions clearly and prepare accordingly for a more targeted and effective approach.

What should the placement aspirants look forward to? Should they have any preconceived opinions?

Placement aspirants should approach the process with an open mind and a positive attitude. Rather than forming preconceived opinions about specific companies or roles, focus on gaining a thorough understanding of the industry, the company's culture, and the expectations for the roles you are interested in. Look forward to learning from the experiences, both successes, and setbacks, and use them as opportunities for your development. Ultimately, approach the placement journey with curiosity, enthusiasm, and a willingness to explore diverse opportunities.

NAGAVEL RAJASEKARAN

What are the preparations to be made before sitting for placements?

Being confident in one programming language is crucial. Knowing multiple languages is an added benefit but you need not be a polyglot and having good conceptual knowledge in any programming language will be appreciated during the interview. Some companies do value candidates who know Java but they can very well select a person who shows proficiency in a language of their choice. Core companies look for C/C++ knowledge. They also test the knowledge on basic concepts of electronics and communication subjects taught during our first 4 to 5 semesters. Eligibility criteria usually include having no standing arrears or sometimes no history of arrears, a cgpa of 7+ or 8+. Try to practice Data Structures and Algorithms and revise theoretical subjects like OOPS, Networking, OS and DBMS.

What role were you interviewed for? How were the various rounds?

I was interviewed for the Development Engineer 1 role. There was a technical and an HR round. However, the technical round did contain a few HR questions followed by questions from my resume and finally a DSA problem. Technical questions asked were related to basic algorithms and the technologies mentioned in the resume. The HR round primarily was to verify if I would be able to relocate if necessary.

What is your “advice” for your juniors?

Start doing DSA even if you're only aspiring for core companies as core companies test your C/C++ knowledge through a couple of DSA problems in the online test. Get comfortable with basic topics like arrays, strings, linked lists, stacks, queues and trees. Explore a domain of your interest and do projects related to that domain. Projects are valued more than courses and certificates. Revise the technical concepts which were covered in our syllabus and for the ones which weren't, try to study them, to obtain surface level knowledge which is enough to clear the online tests, from websites like Coding Ninjas and Geeks for Geeks. Try to format your resume to suit the job description of the company, although it is not mandatory. Do not add skills which you aren't familiar with because you will be asked a lot of questions from your resume alone.

What should the placement aspirants look forward to? Should they have any preconceived opinions?

There will be a wide variety of companies that visit, so there's no need to worry about finding a good fit. Feeling anxious and stressed before an interview is normal. But remember, the interviewers are usually trying to hire you and not reject you. They will almost always be willing to help you and give you hints. Maintaining composure and communicating clearly goes a long way. Try to keep a clear head and do not arrive at conclusions about possible interview questions based purely on the job description.

HEMANT KUMAR

What are the preparations to be made before sitting for placements? Elaborate on the eligibility, prerequisites,etc.

Before interviews, focus on aptitude, computer knowledge MCQs, and coding. I used Indiabix for aptitude and programming questions. I learned DSA on GeeksforGeeks, and practiced coding on LeetCode to grasp patterns and solve problems under time pressure. A CGPA of 7 or above is usually enough for software roles.

What role were you interviewed for? How were the various rounds? Give a brief about each round and specify the nuances.

For the Comcast position, the initial round was an online assessment on the Mettle platform. This round aimed to assess the candidate's general strengths in software and covered various language-specific questions, including pseudocode-based objective questions in Java, CPP, Python, Linux commands, SQL knowledge, Automation, and testing. Moving to the second face-to-face interview round, the focus was on diving deeper into my skills and experiences. The session began with a test on RDBMS concepts, followed by the implementation of basic Data Structures using Python. The interviewer delved into my personal projects in Machine Learning and my collaboration with BOSCH, exploring the skills I gained during my internship. A crucial aspect of this round involved a speed oral examination to evaluate behavioral skills. Towards the end, I had the opportunity to inquire about the company's culture, the exposure they provide, and other relevant aspects. I believe the skills mentioned in my resume and previous internship exposure significantly influenced the role offered to me as a Data Engineer which was communicated only upon receiving the offer.

Give your take on any specific round that intrigued you in detail.

As a fresher, the spotlight was on the importance of showcasing my personality and convincing the interviewer about my confidence and domain expertise. This became particularly crucial to compensate for any gaps in my resume or potential shortcomings during the interview. A standout moment was when I faced extensive questioning about my internship experience in Workflow Automation using ServiceNow. The interviewer delved into my interactions and collaboration with my team, emphasizing the significance of effective communication. I believe that my ability to articulate my experiences played a pivotal role in securing the offer.

What is your “advice” for your juniors?

My advice to juniors is to attend interviews for all roles that reasonably align with your career aspirations. This approach provides valuable insights into your weaknesses and allows you to adjust your performance accordingly. A few unsuccessful attempts can serve as learning opportunities, helping you identify areas of improvement. With consistent practice, you'll be well-prepared to secure your desired job.

-Rupadharshini R
II year, ECE-B

TEJAS NETWORKS

Pradheep M, a final-year student from our department of ECE has earned his placement at Tejas Networks; an optical, broadband and data networking products company based in India. Want a great insight on how to get a core company placement which relies on your DSA skills? Read on then!

1. What was your domain of interest during your 2nd year of college and did it change over time? If so, what was the change?

During the second year of my college, I was into software – coding and web development. Even during placements, I was hoping to get into the software domain. And now, I got placed in Tejas Networks (which is a core company as far as ECE is concerned) which was more related to wireless networks and software. Since my job now also includes coding, it didn't basically change.

2. Which factors helped you to choose placements over higher studies?

I wish to do an MBA and in order to do one, it is preferable to have 2 to 3 years of work experience. Universities abroad and the old IIMs prefer people with such experience. In fact, it is mandatory to have 2 to 3 years of work experience when you are trying for abroad universities.

3. How did you prepare for your placements?

It all started with DSA. Youtube has everything that you need. Only other thing which you have to do is to consistently work on it. Then, I started doing projects in my third year based on web dev and did a few projects on ML too. This pretty much covers the preparation aspect: Youtube, DSA and 2-3 solid projects in the domain of your interest.

4. What was the selection process? How were the candidates shortlisted and what was your experience?

Usually, there will be two to three rounds. The first round was aptitude test and coding and there will be three to four sections. In aptitude, you will be having questions based on topics like quantitative, verbal, logical reasoning and so on.

The second round will be the technical round, where you will be tested on the domains which you have mentioned in your resume. Be strong in your basics as that will help you in the long run too.

The third round is an optional technical round and finally, you will have the HR round. A moderate difficulty level aptitude questions were asked during the first round. I also had four coding questions and all the four were medium-level leetcode problems on DSA.
In the second round (i.e. technical interview), I was asked questions based on DSA and I had to

solve four questions based on it. I was also asked about OS and networking concepts.
In the third round, which was the HR interview, they just asked a few behavioural questions and they checked my academic background, my interests and other personal details.

5. Was there any surprise element in your interview? Be it the questions that the panel asked or the last-minute arrangements made or ...?

Though this was a core job, they asked questions about OS but we didn't have OS in our coursework. So, I ended up reading about it a week before the interview.

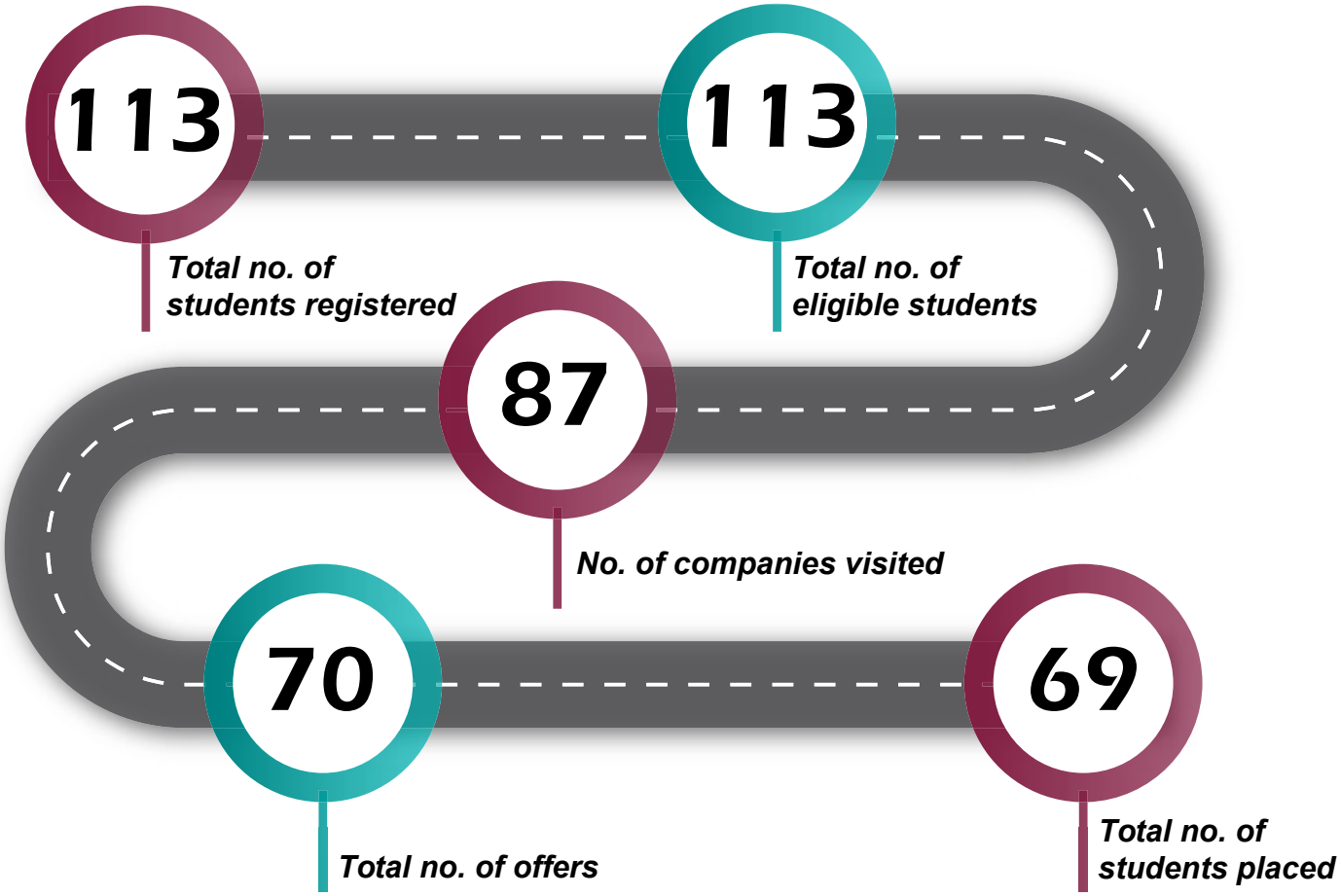
6. What would your advice be to the upcoming batches in our college who are trying for placements?

Start exploring and build few projects. At the end of the day if you build a project, you will learn a lot when compared to doing courses. Find your interest and what you would like to work on for the next 10 years or so. And for that, you have to explore all the fields without hesitation.

-Ajitessh R
II year, ECE-A

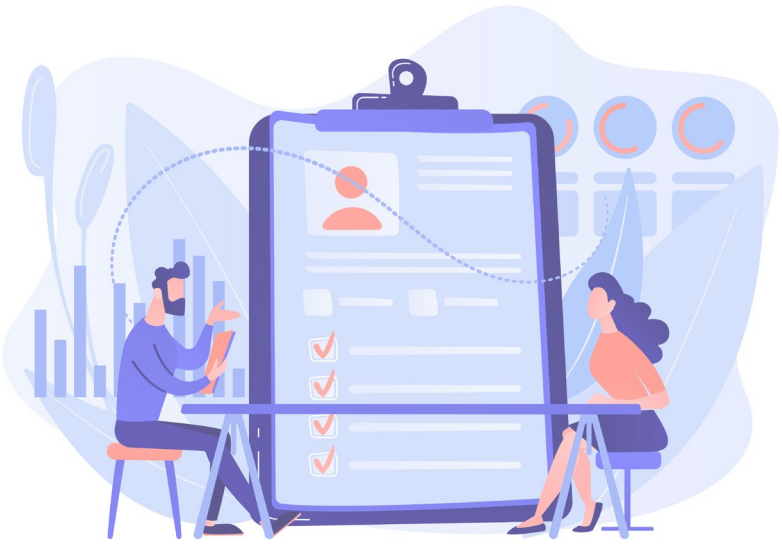
PLACEMENT REPORT

UG PLACEMENT REPORT



PG PLACEMENT REPORT

Total no. of students registered:	6
Total no. of eligible students:	6
No. of companies visited:	35
Total no. of offers:	1
Total no. of students placed:	1
Total no. of internship offers:	5



MARQUEE AND SUPER DREAM COMPANY PLACEMENTS (UG)

Sruti K A
Citi Bank
18.00 LPA

Ananya Kundu
NatWest
13.00 LPA

Ananya Prabhu
NatWest
13.00 LPA

Hariharan A
NatWest
13.00 LPA

Pranav SP
Yubi
12.72 LPA

Rithik Vijaykumar
Fidelity Investments
12.30 LPA

Pradheep M
Tejas Networks
10.00 LPA

Ganesha M
Tejas Networks
10.00 LPA

NAVIGATING THE INTERNSHIP TERRAIN AT MINDGROVE TECHNOLOGIES

Internships play a crucial role in shaping students' careers - they bridge the gap between theoretical knowledge acquired in classrooms and real-world applications within the industry. This year, Naveen Jai Krishna, a final year undergrad, pursued an internship at Mindgrove technologies in the field of Hardware design during his summer break.

Mindgrove is a tech startup, backed by the IIT Madras Incubation Cell that designs high performance System-on-Chips (SoCs). These RISC-V chips find applications in industrial automation, electronics, defense, aviation and more!

In a recent interview, I had the opportunity to delve into his internship experience and the insights are covered in this article.

1) What is the startup Mindgrove technologies about?

Mindgrove designs state-of-the-art, scalable and reliable System-on-Chips (SoCs). Headquartered in Chennai, it was started to design cost and power-effective microprocessor technology in the world.

2) What motivated you to apply for the internship at Mindgrove technologies?

My profound admiration for VLSI and its immense potential have inspired me to pursue my career in the core field directly after my Bachelor's degree. However, jobs in this field are a tough nut to crack, especially for freshers. So I thought that pursuing an internship in that field would equip me with the necessary skills required to kick start my career in the industry.

3) How did you apply for the internship, and what is the general procedure?

It was a simple cold-emailing approach. Around mid May, when I was in my sixth semester, I directly mailed my resume to the HR at Mindgrove and they got back to me positively the very next day.

4) Were there any further rounds of interviews?

No, there weren't any. They only asked me to visit their office once, a couple of weeks before the internship began.

5) What was it in your resume that you think that got you this internship?

I believe that my previous internship experience and a relevant frontend VLSI project that I undertook played a crucial role in securing this internship. The skills and insights gained during the prior experiences not only demonstrated my passion for VLSI but also provided a practical foundation that appealed to Mindgrove's requirements.

6) During your internship, what were the areas you worked on?

I worked on RTL design and verification where I researched on boolean algebra algorithms and implemented it in HDL, worked with the verification team and fixed bugs in modules they use in their chip.

7) How did you find the working environment there?

This internship is undoubtedly one of the most rewarding learning experiences of my academic career. The people at Mindgrove were very friendly and welcoming. It was easy to approach them with doubts.

8) Your advice for the students who would like to apply for an internship at Mindgrove, as to what skills they should focus on developing?

To start with, Python is a must, as we start with the process of verification using the "cocotb" module. For the next steps, I would say that sound knowledge of digital electronics, computer architecture, and bluespec is essential. If you're interested in embedded electronics, C is very important, along with hands-on experience with Arduino and FPGA.

9) What did you learn from this internship and what role has it played in shaping your career aspirations?

Most importantly, it has reminded me how much I love this field. During this period, I gained a first hand experience in understanding the industrial workflow, and got to know more about the skill-set required to pursue a career in the VLSI domain and the numerous career opportunities that it has to offer.

- Sowmika D
II year, ECE-B

FIDELITY INVESTMENTS

Fidelity Investment is an American multinational financial services corporation based in Boston, Massachusetts. The organization operates a brokerage firm, manages mutuals funds, provides fund distribution, retirement services, securities execution, life insurance and few other services regarding asset custody.

Last year, **Rithik, a final year student of ECE department** managed to bag an internship offer at Fidelity. It was an on campus offer, students underwent a series of tests and interviews, he was one of the shortlisted candidates for this program. Rithik has shared his overall experience about his internship at Fidelity, here follows the interesting snippets of the conversation regarding his experience.

1.What are the skills and domains that students need to focus on to bag these internships?

One should Focus on mastering data structures and algorithms (DSA) to excel in technical interviews. Additionally, you should showcase your capabilities by presenting projects you have worked on. Regular practice of aptitude questions from various websites improves the test-taking speed.

2.What was the selection process for this internship, explain the rounds of tests undertaken and how to prepare for them?

The selection process consists of 3 rounds: Online assessment, technical interview, and followed by a HR round. Adept yourself in DSA, OOPS and DBMS topics and ensure that you can answer questions about the projects you have worked on.

3.How to stand out from the crowd and impress the interviewer?

You should have a clear understanding of your strengths, be straightforward in your resume and do not include what you don't know in your resume. Since there is always a good chance the interviewer can question you on that.

4.How important is programming for the role as an intern at the respective organization?

Throughout the internship, we had to focus on programming, making it an essential aspect of the role.

5.What role did projects and previous internships play in the interview process and how did it impact your work as an intern?

My past projects allowed me to demonstrate my knowledge of various technologies to interviewers. This improved my understanding of software project workflows, which was beneficial during my internship.

6.Were there any prerequisites that one had to know before joining as an intern? If yes, what are they and how did you achieve them?

During the internship, we had time to learn the technologies before working on them. The necessary resources for learning will also be provided, so there's no need to worry about them

7.What is the organization looking for in a candidate? Elaborate the requirements of the organization.

The candidate should have a solid grasp of programming basics and concepts, enabling them to learn new technologies and apply them effectively.

8.What did you learn from this internship? What are your thoughts and opinions on this experience?

During my internship, I learned and implemented new technologies and gained insights into corporate teamwork, time management, and other disciplines.

9.What are the tips that you would like to share with your juniors who aspire to do internships?

Get started by learning DSA (Data Structures and Algorithms), focus on a specific domain, and try to be adept at it. Continuously practice DSA problems to prepare for job placements and internships. Review previous years' test and interview questions if available to understand the test patterns.

-Karthayani.T.S
II year, ECE-A

MASTERS

SAMPATH KUMAR, NETHERLANDS

Sampath Kumar Utharavel has successfully completed his Master's degree with a specialisation in Integrated Circuit Design from the University of Twente, Netherlands. Currently, he is gaining valuable industry experience as an Analog Design Intern. His dedication and academic background position him as a promising professional in the realm of Integrated Circuit Design and Analog Engineering.Here, we the Impulse magazine team catch up with Sampath as he recounts the journey that led him to his dream university. Read on to know more!

Shruti: How did you navigate the crossroads between career placements and pursuing masters?
Sampath: From the outset, my unwavering aspiration was to pursue a Master's degree. The domain I chose, Integrated Circuit Design, inherently demands experience, and opportunities for freshers were notably limited. Placements, particularly in the year 2021, predominantly leaned towards software-oriented roles, with a notable absence of companies like Silicon Labs and Texas Instruments in the circuit design domain.

Shruti: What prompted the pursuit of a Master's degree?
Sampath: The academic material within Integrated Circuit Design was not only captivating but also diverse, covering specialised areas such as Analog, Mixed Signal, and RF. The attraction of delving into these diverse domains, combined with the opportunity for an international academic experience, served as strong motivators, prompting me to venture beyond my comfort zone and pursue a Master's degree.

Shruti: How did you ensure that your chosen specialisation in Masters seamlessly aligned with your undergraduate studies?
Sampath: The inspiration to specialise in Integrated Circuit Design stemmed from observing exceptional ECE seniors, particularly those involved in Networking, during the SIH 2018 competition. Witnessing their self-driven projects and knowledge development served as a benchmark for my academic journey. Further exploration of diverse topics in ECE at the college library, guided by a passionate senior, ultimately led me to the field of Integrated Circuit Design. Practical exposure to theory and hands-on circuit building further solidified my choice in this specialised domain.

Shruti: How did you approach the preparation of your resume, statement of purpose (SOP), and letters of recommendation (LOR) for your Master's application?
Sampath: The preparation for my Master's application involved meticulous steps, including crafting a resume showcasing two self-initiated projects, a substantial final-year project, and strategically chosen internships in alignment with my specialisation. The Statement of Purpose (SOP) was a deliberate process, initiated three months prior to applications, with input from seniors and constructed gradually in small, well-thought-out paragraphs. The inclusion of three Letters of Recommendation (LORs) was a crucial aspect, each serving a distinct purpose – one from the HOD providing a

general overview, one from a VLSI professor focusing on IC design works, and a third from the CEO of my internship company.

Shruti: Which tests did you take for the application process?
Sampath: In navigating the complexities of application tests, the decision to forgo GRE due to cost considerations and the diverse requirements of EU universities stands out. This choice accentuates the centrality of IELTS for EU applications, recognizing its influential role in the admissions process. Acknowledging the significance of IELTS, there is a reflection on the missed opportunity resulting from insufficient preparation, particularly impacting the application to KU Leuven, Belgium. A prudent piece of advice echoes through, underlining the diligence required to attain a commendable IELTS score while keeping in mind the financial constraints associated with retaking the test. The counsel also extends to the strategic pairing of a strong GRE score with proficiency at the German A1 level, further amplifying the overall impact of the application.

Shruti: How did you navigate the financial aspect of pursuing a Masters?
Sampath: Hailing from a middle-class background, I share a personal journey marked by reliance on education loans for both undergraduate and postgraduate studies. This financial trajectory has instilled a profound sense of responsibility and discipline in managing academic pursuits.

Shruti: What was the timeline for your application process?
Sampath: Managing the unique application timelines in Germany, marked by differing deadlines among universities. Emphasising the significance of prompt applications in the Netherlands, particularly for esteemed institutions such as Delft and Eindhoven.

Shruti: How did you prepare for interviews, specifically for the role of Analog Design Engineer?
Sampath: Prioritising fundamental knowledge in circuit analysis, particularly RC circuits, as essential for interviews in Analog Design roles. Encouraging candidates to build proficiency in understanding resistors, capacitors, MOSFETs, and basic amplifiers for a competitive edge.

Shruti: What opportunities are available for Master's students
Sampath: The field of Master's studies, particularly in the EU, presents abundant opportunities, with a thesis-based curriculum allowing students to delve into research and subsequently decide between pursuing a Ph.D. or entering the job market.

Shruti: How did connections with faculty influence your decision to choose the University of Twente for your Master's?
Sampath: During my undergraduate studies at SSN, I reported to Prem Anand sir, who played a crucial role in validating my designs. However, the pivotal moment came when I discovered Professor Bram Nauta's renowned research in Integrated Circuit Design. This influential encounter and learning about his work through online platforms, including LinkedIn, significantly motivated my decision to pursue my Master's at the University of Twente. It was surprising and encouraging to find that Professor Nauta remembered me from our very first interaction on my arrival at the department, solidifying my choice further.

Shruti: How crucial is the right mindset and a willingness to learn and grow when venturing into the field of Integrated Circuit Design for a Master's degree?
Sampath: Having the right mindset and a genuine eagerness to learn are paramount in navigating the intricate journey of pursuing a Master's degree. This journey is not just about acquiring knowledge but also about stepping out of one's comfort zone, embracing challenges, and planning strategically for personal and professional growth. The willingness to explore new horizons and adapt to different learning environments becomes a catalyst for success, allowing individuals to start afresh in their Master's endeavours with enthusiasm and a proactive approach.

Shruti: How did your participation in clubs and events enhance your academic journey and skill development?
Sampath: Engaging in leadership roles, I took charge of the Analog IC Design domain in the Tech club, an experience that culminated in leading a victorious team in SIH 2018. Through these roles, I found value in extracurricular activities as platforms for skill-building and application of theoretical knowledge. Simultaneously, I advocate for a balanced approach to involvement in literature writing, advising against becoming overly fixated on scientific papers during undergraduate studies. The key lies in understanding the comprehensive nature of academic pursuits and recognizing the importance of diverse experiences for holistic development.

Shruti: How important is maintaining a good CGPA, and what role did it play in securing admissions to Master's programs?
Sampath: Navigating the academic landscape with a realistic perspective akin to the protagonist in "Ae Dil Hai Mushkil," my journey with CGPA mirrors the ups and downs. Recognizing the significance of a good CGPA, especially in securing admissions to Master's programs, I faced challenges but managed to maintain a reasonable standing. My advice to aspiring students is to prioritise a good CGPA, as it serves as a crucial element in the competitive realm of graduate admissions, providing a solid foundation for future pursuits.

Shruti: How did the VISA application process go for your Master's in Germany and the Netherlands?
Sampath: Ensuring a timely initiation of VISA applications upon securing admission offers in Germany, the process is highlighted for its meticulous nature. A notable contrast is drawn with the smoother and more straightforward VISA process experienced in the Netherlands.

Shruti: What are your current plans and aspirations after completing your Master's degree?
Sampath: As I approach the completion of my Master's Thesis, I'm currently immersed in the final phase of my academic journey. Looking ahead, I anticipate transitioning into the professional sphere, actively exploring job opportunities. With a commitment to contributing to the field, I envision dedicating at least another 4-5 years to my career in the EU.

Shruti: How is the course structure at the University of Twente, and how is practical work integrated into the academic curriculum?
Sampath: In the European Union, particularly at the University of Twente, the academic approach is challenging yet well-balanced. The courses are meticulously designed, incorporating a harmonious blend of theoretical concepts and hands-on practical work. This holistic approach not only enhances the depth of understanding but also prepares students for real-world challenges, fostering a comprehensive learning experience.

Shruti: Finally, what advice would you like to give any MS aspirants reading this?
Sampath: To the many MS aspirants out there, I'd like to say:

- Don't be disheartened by your CGPA; with determination, you can overcome challenges and improve your situation.
- Invest extra effort in your projects and research papers, embracing the opportunity to learn new things.
- Be courageous in applying to ambitious universities; it's better to face rejection than to never try at all. You never know what opportunities may arise if you take the chance!

Email: sk102.official@gmail.com

- Shruti Chandrasekar
II year, ECE-B

GAYATHRI, USA

1. What program were you pursuing, and which university were you attending?

Gayathri: I graduated from Texas A&M University, College Station with a specialization in "Reinforcement Learning in 5G Networks". I had courses related to operating systems, machine learning and reinforcement learning, and network related courses. Currently, I'm working at ARM, Inc. in the 5G networking domain.

2. What factors influenced your decision to pursue studies in the US, and how did you determine your specific field of study?

Gayathri: I decided to pursue studies in the US after participating in various hackathons and working on projects in the broad field of ECE, which includes VLSI, Embedded Systems, Networking, and exploration of domains like machine learning. These experiences steered me towards focusing on 5G Networking, leading to me working with Big Cat Wireless (a startup) as my Final Year Project. In my exploratory phase, I had participated in both internal and external technical events.

3. At what point did you make the decision to pursue a postgraduate degree, and do you think it's acceptable to be uncertain about further studies? If yes, until when is it reasonable for a student to delay this decision?

Gayathri: While I initially explored various domains during my first and second years, I progressively aligned my profile towards my specific field of interest, starting in my third year. I would say it's completely okay to be uncertain. I have seen some of my friends' uncertainty about their specific domains even in their fourth year, leading them to pursue a general degree such as Electrical and Computer Engineering. My advice would be to decide on a domain by the fourth year of undergraduate studies. And whether to pursue Highers by third year.

4. Is it advisable to work in IT before pursuing higher education, and does this professional experience impact the application process?

Gayathri: It is acceptable to switch careers, but it's crucial to present yourself accordingly in your application. Professional experience adds value and demonstrates versatility. Keep in mind that the application process differs from applying for a job tailored to a specific job description.

5. How crucial are Letters of Recommendation (LOR) and Statements of Purpose (SOP) in the application process? Could you provide insights into the individuals from whom one should seek an LOR? Additionally, would you be willing to share some details about your own experience with LORs and SOPs?

Gayathri: Letters of Recommendation (LORs) are essential for your application, typically requiring three, but this can vary by university. It's ideal for these to come from professors who have guided you in your projects. Even if you have work experience or international internships, obtaining at least one LOR from your college is recommended. In addition to LORs, your Statement of Purpose (SOP) should address your career aspirations, academic achievements, and the reasons for pursuing a master's degree. Alongside these, your resume also holds significant importance in your application. This acts as a thrust in your candidacy.

6. In your perspective, what unique qualities or experiences distinguished your application from others?

Gayathri: I believe that my application effectively conveyed my passion for Networking and projected my aspirations for the future. Rather than overwhelming them with mere facts about my projects and academic achievements, I incorporated a storytelling element, giving me a distinctive edge in my candidacy.

7. How crucial is research experience in applications, and what level of quality do admissions committees typically expect in undergraduate research?

Gayathri: Engaging in activities from small paper presentations to major journal publications holds significant value. In the US, universities offer two tracks: Thesis and Non-thesis, with the latter not mandating research involvement. For students not pursuing the thesis track, the research component is not essential but definitely improves your candidature.

8. When do you recommend finalizing the choice of college or university for higher education?

Gayathri: As a fall applicant in 2024, I recommend gathering LORs and drafting your SOP by October, with completion of the application process by December 15th of the previous year (2023). Use the months of November and December for research about institutes, Having multiple options is advisable; for example, I applied to 8 universities in the US alone.

9.Can you provide insights into available scholarships in the US? Could you rank destinations based on both monetary support and opportunities?

Gayathri: Universities provide specific scholarships, and we can also access loans and seek external support without collateral. The support from external firms depends heavily on your application, as interest rates are determined by it. In my case, my university offered concessions for Thesis track students, and I also received support from an external firm called SleepFinance. Based on opportunities, the countries of interest are the US, Canada, and Germany in descending order, and in terms of monetary support, it would be ascending.

10. How significant are the quality of internships and participation in clubs for someone aiming to excel in their chosen field?

Gayathri: I strongly recommend getting involved in clubs and starting to learn during your undergraduate years. I also encourage taking on leadership roles in clubs as they can add significant value.

10. How significant are the quality of internships and participation in clubs for someone aiming to excel in their chosen field?

Gayathri: I strongly recommend getting involved in clubs and starting to learn during your undergraduate years. I also encourage taking on leadership roles in clubs as they can add significant value.

11. How is the recruitment process typically conducted in the United States? and do universities in the U.S. offer placement assistance? If not, what strategies can individuals employ to navigate the job market effectively?

Gayathri: In the US, there are campus fairs where companies set up stalls for resume submissions. Unlike the concept of a CDC, companies independently select candidates based on their resumes. I recommend reaching out to companies from your first week of joining using platforms like LinkedIn to allow ample time for finding the right fit.

12. What challenges does one encounter due to visa requirements? Additionally, could you share insights into the duration one can stay in the country while searching for a working visa after completing the coursework?

Gayathri: After completing the coursework, individuals can stay in the country for 60 days without a job. Some students bypass this rule by obtaining unpaid internships. In my case, I obtained an F1 visa as a student in the US and am now working with F1 OPT visa at ARM. After this, I plan to apply for an H1B work visa.

***13. What is the feasibility of securing placements in the coming years, in the wake of two ongoing wars and recession*?**

Gayathri: It's challenging, especially with the US expecting another soft recession in 2024. I advise everyone to prepare for it by focusing on improving their skills and profile to be ready for any challenges ahead.

14. What are the notable differences between the educational experience in the United States and India?

Gayathri: In India, courses and faculty are predetermined, whereas in the US, students have the freedom to choose their courses and professors. The US education system places a strong emphasis on critical thinking, contrasting with India where we often work with a pool of questions. While the testing in the US is tougher, it is also more engaging. Throughout the coursework, support from friends, teachers, and online resources is available, leading to significant improvement in critical thinking by the end of the masters program.

15. Provide an overview of your current role, specifically delving into how Reinforcement Learning synergizes with 5G technology.

Gayathri: In my project, I perform resource allocation and enhance the rate of it using RL. In my work at ARM, I perform 5G systems testing and compare its performance against Intel processors.

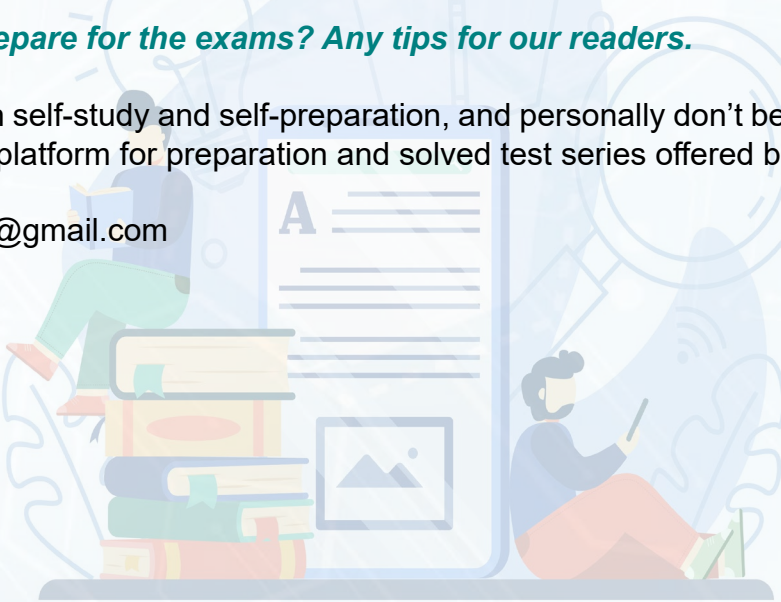
16. Is it necessary to take tests like GRE as many universities are not mandating such scores anymore?

Gayathri: While it's true that many universities are not mandating such scores anymore, it's always great to be on the safer side and take the tests. Despite not being mandated, test scores always provide an edge. My recommendation would be to take the tests.

17. How did you prepare for the exams? Any tips for our readers.

Gayathri: I believe in self-study and self-preparation, and personally don't believe in classes. I used the Magoosh online platform for preparation and solved test series offered by online platforms.

Email: gayathri1908@gmail.com



- Pavan V
III year, ECE-B

AN ALUMNUS EXPERIENCE

JASWANTH D, COMCAST

The infamous ''hot seat'' of a candidate and the binding seat of the interviewer are two completely different sides. Yet, it was my pleasure to have a chat with Jaswanth D, our alumnus, who had the opportunity to experience the juxtaposition.

From being a student at SSN to becoming an employee at COMCAST to becoming an interviewer, he wore many hats in his short period of time at COMCAST. COMCAST is a global media and technology company. From the connectivity and platforms they provide, to the content and experiences created, they reach hundreds of millions of customers, viewers, and guests worldwide. They are synonymous with bringing together innovative technology and extraordinary content!

- **How would you describe the transition into the corporate world of COMCAST? What are the "things" that made you go "Ah, this is work!"?**

The transition into the corporate world at COMCAST has been an enriching experience. Initially joining as an intern, I had the opportunity to learn and apply my skills in a real-world setting. What stood out to me during this transition was the collaborative and innovative work culture at COMCAST. The emphasis on teamwork and the practical application of machine learning concepts in real projects made me realize the significance of my academic knowledge in a professional context.

The "Ah, this is work!" a moment came when I was entrusted with responsibilities that directly contributed to the development of machine learning solutions. The fast-paced environment, coupled with the need for quick decision-making, highlighted the dynamic nature of the industry. Additionally, being part of impactful projects and witnessing the direct impact of my work on the company's objectives reinforced the sense of responsibility and excitement that comes with being a part of a leading technology company like COMCAST.

- **How was it, being on the other side? Is this your first time interviewing candidates?**

Being involved in the interview process from the employer's perspective has been a unique and insightful journey. While this marks my debut in formally interviewing candidates on behalf of a company, I had previously engaged in interviewing candidates during college as part of a MOCK PLACEMENTS event in the ECE DEPT FEST, which proved to be a valuable experience. The shift from being an interviewee to an interviewer has broadened my understanding of the qualities employers seek in potential candidates.

My exposure to the recruitment process at COMCAST has deepened my appreciation for the attributes and skills that set exceptional candidates apart. Beyond evaluating technical proficiency, I now recognize the importance of assessing how well candidates can adapt to a collaborative and dynamic work environment—qualities particularly critical in a technology-driven company like COMCAST.

While taking on the responsibilities of an interviewer, I've found gratification in contributing to the identification of future talent for our organization. It's rewarding to play a role in shaping the skills and potential of individuals who can bring innovation and value to the team. I am thankful to my Director for entrusting me with this opportunity and demonstrating confidence in my abilities.

- **What's your method for filtering the apt candidates? What are the points/features that distinguish THE candidate?**

Filtering through candidates involves a holistic evaluation process that considers both technical expertise and soft skills. Here are some key points and features that distinguish an ideal candidate:

1. ***Technical Proficiency:*** I look for candidates who demonstrate a solid understanding of algorithms, data structures, and relevant programming languages.
2. ***Problem-Solving Skills:*** I assess how candidates tackle problems, break them down, and articulate their thought process during the interview.
3. ***Adaptability:*** Given the fast-paced nature of the tech industry, adaptability is key. I look for candidates who show a willingness to learn, adapt to new technologies, and thrive in a dynamic environment.
4. ***Communication Skills:*** Clear communication is vital for collaboration and project success. I assess how well candidates can articulate their ideas, explain complex concepts, and communicate effectively with both technical and non-technical stakeholders.
5. ***Collaborative Spirit:*** Working in a team is integral to our projects. I seek candidates who can demonstrate their ability to collaborate, share ideas, and contribute to a positive team dynamic.
6. ***Previous Experience and Projects:*** Experience, especially in relevant internships or personal projects, provides insights into a candidate's practical skills and their ability to apply theoretical knowledge in real-world scenarios.

By considering these points, I aim to identify candidates who not only possess the technical expertise required for the role but also demonstrate the qualities that align with the values and expectations of our team at COMCAST.

- **What was your take away from this experience of participating on both sides?**

Participating on both sides of the interview process has significantly enriched my professional development. This experience has provided me with a comprehensive understanding of the recruitment process, offering insights into challenges faced by both candidates and employers. Conducting interviews has sharpened my communication and interpersonal skills, emphasizing the crucial role of soft skills in evaluating a candidate's fit within the team and company culture. As an interviewer, I've contributed to shaping our company culture by identifying candidates aligned with our values. Continuous exposure to diverse perspectives during interviews has fueled my ongoing learning and professional growth in the field of machine learning. This experience has heightened my

self-awareness, prompting continuous assessment and enhancement of my skills to stay relevant in the ever-evolving tech landscape. In essence, this journey has been a holistic learning experience, extending beyond technical assessments to refine my skills and emphasize the importance of soft skills in fostering a successful and collaborative team.

- **Any points you wish to convey to the future placement aspirants of SSN?**

Here are some concise points for future placement aspirants at SSN:

1. ***Prioritize Continuous Learning:*** Stay updated on industry trends and emerging technologies.
2. ***Gain Practical Experience:*** Seek internships and engage in real-world projects.
3. ***Develop Soft Skills:*** Hone communication, collaboration, and adaptability.
4. ***Prepare for Interviews:*** Practice technical and behavioral questions for confidence.
5. ***Showcase Your Projects:*** Create a portfolio or GitHub repository to demonstrate your skills.
6. ***Embrace Resilience:*** View rejections as opportunities for growth and improvement.

Remember, the journey from aspirant to professional is a continuous process of growth. Stay focused, proactive, and embrace learning opportunities. My Best Wishes to all future SSN placement aspirants!

-Rupadharshini R
II year, ECE- B

ADAPTIVE SIGNAL PROCESSING

Life reveals a complex dance of balance and adjustment, where change is the only constant. Stepping beyond our comfort zones is a catalyst for growth, pushing us to face the unknown and embrace new possibilities. Similarly, adaptive signal processing, a formidable technical tool, allows new algorithms to balance uncertainty and finesse, and adapt dynamically to different situations. In human experience, the importance of Error correction coincides exactly with the importance of adaptive symbolic processing. This mechanism works by using a feedback loop to reduce errors and address complexity. Let us elaborate on the thought-provoking insights of Dr. Satyakam Baraha. Assistant professor at SSN College of Engineering. Dr. Satyakam is a renowned expert in SAR image processing, optimization techniques, adaptive signal processing, and Semantic Learning. His expertise is in image optimization using synthetic apertures. radar, optimizing algorithms, and developing adaptive signal processing solutions. Continued, adaptive signal processing is used to predict system behaviour and adapt. In new situations, based on known algorithms, he said, “Adaptive signal processing is a tool that uses feedback loops to correct the errors of previous iterations and adjust dynamically to accommodate new uncertainties. It is commonly used in radar station.”

Let’s use a real-world analogy to explain adaptive signal processing. Imagine you’re trying to listen to a specific radio station, but the signal is weak and there’s a lot of static interference. Your goal is to adaptively process the incoming signal to clean it up and hear the music clearly. The process includes: 1. sparse the signal; 2. Noisy measurements 3. Adaptive Signal Processing Algorithms 4. Iterations 5. Recovered Signal.

Consequently, the concept of adaptive filtering began to take place in the 1950s. Work focused on developing algorithms that could automatically adjust their parameters to optimize performance in the presence of changing signal conditions. Over the past decade, the landscape of adaptive signal processing has undergone a remarkable transformation, moving away from traditional algorithms like LMS (Least Mean Squares), RLS (Recursive Least Squares), NLMS (Normalized Least Mean Squares), and Kalman filters. The field has evolved significantly, with a notable shift towards the integration of learned systems. These predetermined algorithms are designed to adapt to changing input conditions through predefined mathematical rules. Today, the Integration of learned systems has led to notable improvements in efficiency and performance. Algorithms can now navigate complex signal structures and denoise signals more effectively and adapt in real-time to changing conditions, enhancing generalization. “Our research team unearthed LISTA (learned ISTA) as a pivotal breakthrough in adaptive signal processing.” It is a transformative addition to the landscape-dominated by traditional algorithms such as ISTA (Iterative Shrinkage-Thresholding Algorithm). and FISTA (Fast Iterative Shrinkage-Thresholding Algorithm). LISTA represents a major shift by

introducing learned thresholding, revolutionizing how to approach sparse signal recovery. “It will be helpful for future research in shaping the future of adaptive signal processing methodologies”.

Additionally, a breakthrough that significantly influenced his direction of research in this field is the Wilcoxon norm. The Wilcoxon norm demonstrated a remarkable ability to adapt seamlessly to changing signal conditions. This adaptability is valuable in scenarios where signals evolve over time or in applications that require real-time adjustments.” When traditional norms struggled for incremental updates, The Wilcoxon norm smoothly adjusted to the changing signal conditions.”

“Right now, what excites me the most is the unrolling of networks for deep learning using adaptive signal processing”. Think of adaptive signal processing like a smart system that can understand and make sense of signals, which are essentially patterns or information. Traditional methods used something called RNNs (recurrent neural networks). Networks, which are like tools that are good at understanding patterns that change over time. Now, to make this tool even better, we do something called “unrolling” It’s like stretching the tool’s memory and giving it more time to think. Instead of looking at just a small part of information at a time, unrolling the tool to look back at more details and understand the patterns more deeply.

However, one of the primary challenges lies in translating theoretical advancements into real- world applications. While innovative algorithms and methodologies are developed, In research settings, implementing them in practical systems can be complex. “Nowadays, we need to provide a practical solution with the most generalization, which is a persistent challenge”.

Now, you might wonder: Where do machine learning and artificial intelligence fit into this picture? Will they replace adaptive signal processing? The answer lies in recognizing that even before the advent of modern AI and ML techniques, adaptive Signal processing plays a crucial role in various industries and applications. In simpler In terms of adaptive signal processing, it serves as the foundation for handling signals, patterns, and data dynamics. It provides the essential groundwork upon which AI and ML are built. applications have been built. Instead of replacing adaptive signal processing, AI and ML complements and extends its capabilities, building upon the solid foundation laid by this field.

For example, XAI stands for Explainable Artificial Intelligence, to make the decision-making processes of AI systems more understandable to humans. In this adaptive signal Processing itself may not be directly involved in XAI, but the results and insights gained adaptive processing can contribute as input into XAI models for further interpretation.

One key distinction between machine learning and adaptive signal processing lies in the concept of convergence. In machine learning, the final outcome, or endpoint, is typically predefined, and the algorithm aims to iteratively approach this predefined goal. In contrast, in adaptive signal processing, convergence occurs autonomously. The process continues until a desired output or condition is achieved, with the algorithm automatically stopping when the optimal result is observed.

From its roots in the 1950s to the present, ASP has been instrumental in shaping the landscape of signal processing and beyond. Its integration with various domains, underscoring its adaptability and versatility. The continued collaboration between adaptive signal processing and emerging technologies promises a future where adaptive systems integrate into our daily lives, solving complex problems.

- Indhra SS
II Year, ECE-A

How Hackathons can land you a job ?

I am sure you must have heard about Hackathons at least once in your college life.So, what are these Hackathons? How are they useful to you, and how can they get you a job even before college placements?

Just like the breaking news of 1 & 2 crore packages back in 2020 and 2021, this year, industry analysts say that college placements are experiencing a 50-70% drop. Imagine a college with 1000 students, and 500-700 of them are VIPs (Velai illa Pattadaaris).

Now, contrary to popular opinion, it's not entirely the college's fault. A significant part of it is due to our incompetency, our ignorance towards the latest technology we are not ready to upskill ourselves and align with industry requirements.We still learn C++ in our syllabus, without anything new getting into our curriculum.

Now let's see this from a company's perspective.Let's say you're in a hurry. Will you take the time to cook your own food costing you valuable minutes or just get a take away? Most people would prefer the latter. This is exactly what IT companies' feel right now. They don't wish to spend their time and resources training students, only for them to leave for a better job in just a year or two, They require students who are up to date with the latest technology and can be handed over work instantly out of college with very minimal training.

Now instead of going to war i.e placements and try to win the crown (placement offer), what if I tell you there are other paths which are less crowded and are filled with opportunities? One of those paths include, Hackathons ! So! What are these Hackathons exactly? The answer is in the word itself.

Hackathons are competitions where participants build applications or software within a specific short time frame. For example, a company may host an AI hackathon for 36 hours with the theme of generative AI in Healthcare. Participants must build a working prototype of their idea, pitch it to the judges, and demonstrate how it fits the theme of the Hackathon.
Here, companies will assess your ideation skills, problem-solving ability, team and crisis management, and more. In the past, companies would evaluate these skills in a systematic and sequential manner during placements. However, this approach lacked accuracy in real-time scenarios. With Hackathons, you can participate in all of these tests while enjoying the process of building and aiming for big cash prizes. In addition to the prizes, Hackathons offer cool goodies, great food, and valuable experience. If you perform well, there may even be job opportunities.

In the current world where companies are swiftly shifting to value practical skills and soft skills, the recommended preparation for the current job market is to not memorise coding problems from Leetcode or studying for placements but to step outside your comfort zone and start building and bringing ideas to life.

- Justin Benito B
II year, ECE-B

Hackathons- Stuff we wish we knew

Sometime in March of 2022, I and a few of my classmates got together and attempted that years Smart India Hackathon. We didn't make it very far, we only barely qualified in the internal rounds and thats pretty much where it ended. I never participated in a hackathon again and instead got into learning stuff for project work while some of the others kept at it. Amongst those that continued, one guy actually managed to eventually win at an embedded systems hackathon. Meanwhile, others in my friends group got really invested in Competitive Programming. Most of them had a hard time finding success, especially when it came to team-based hackathons.

At the end of it all, we find ourselves wishing we did things differently, or wish we knew certain things before going in. For those of you that are early in their hackathon journey or are just starting, and there are plenty of reasons for you to get started if you haven't already, heres a list of things you really need to know.

Starting with the things I wish I personally knew, choosing a team isn't based on who's the best academically; it was based on whom I was able to communicate and work with the best. Teams can fall apart very quickly if nobody is on the same page, and that's the worst thing that can happen when you're just getting started. Simply put, team up with whoever is actually glad to work with you and put up with the tedium of the hackathon.

Secondly, pick your topics carefully. We a very confusing problem statement that seemed cool at the time. That was a big mistake because none of us understood how we were going to make it work. If you ever find yourself stuck choosing a problem to solve, either pick a problem that your team can actually solve or problem that is actually worth solving. Take the time to think through everything critically, it'll save you a lot of work later. Besides, the difficulty and complexity of the project usually reveals itself as you're working on it, so in truth, all problem statements will be harder than you initially thought.

And lastly, its about getting your priorities straight. You're not going into a hackathon to win the prize money, you're not going in to win first place, and you're sure as hell not doing it to impress anyone by putting it in your resume; you're doing it to learn something from the ordeal, so it's okay to not now everything going in. You will learn stuff as you progress through the challenge. Everything else I mentioned is just a bonus. This is a sentiment that quite a few of my friends share.

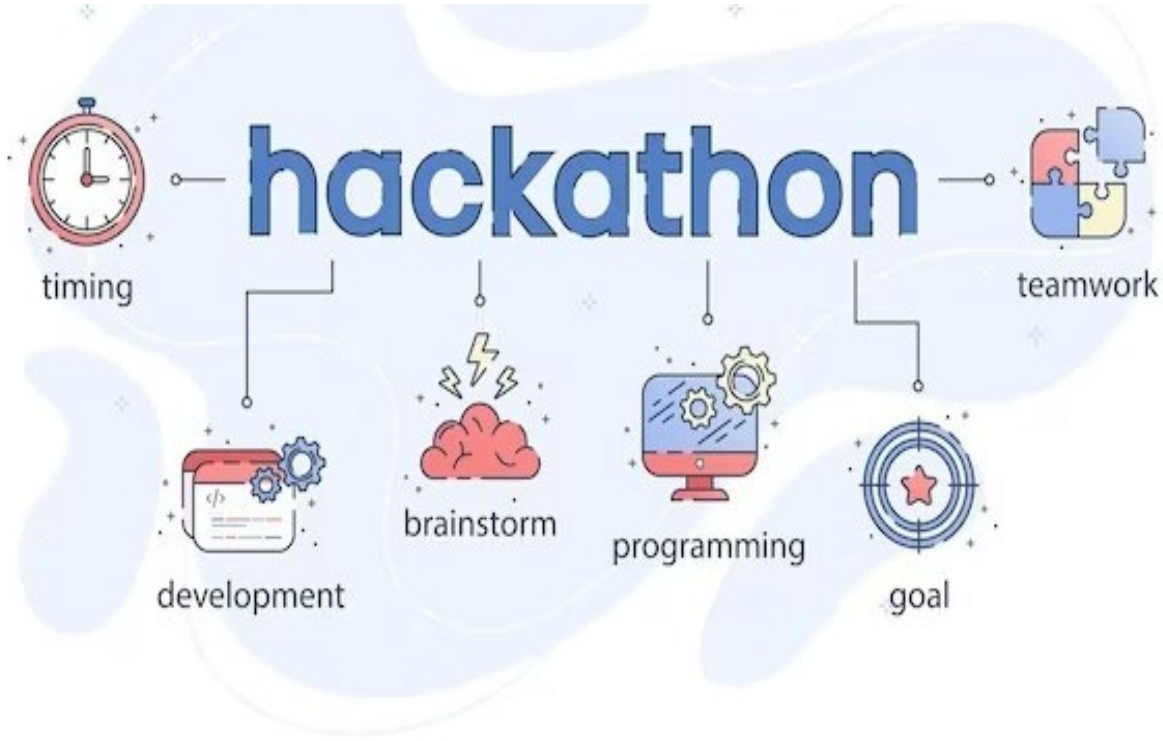
Speaking of friends, I asked them for their inputs too. They too had a lot to say, and I'm going to lay out everything they said in a sort of chronological order.Always stay up to date with the hackathon on every platform, be it through mail, LinkedIn, or Unstop. The rules, deadlines, requirements, venues, timings, etc. of the project are all subject to change by the organizers. Staying updated gives you the benefit of not getting caught off guard with bad news at the worst possible time.sounds good on paper and move on. Please don't make that mistake. Properly understanding the prolem statement is a good deal of work on its own, and in many cases, the person setting the problem statement had one specific interpretation in mind. So, take the time with your team to actually work out what the problem is about. Then you can move onto working on a solution.

Keeping everyone on the same page is really important since team projects usually involve making stuff with lots of interconnected parts, so its important that everyone knows how their parts and the parts they will be interacting with. Know everything theres to know about the workflow of the project. Know all the processes that goes into getting the final product out from planning and resource gathering to implementation and deployment.

The prototype you present is the second most important part of the hackathon. Which is why it is important to have one at all costs. Its far better to have a barely working prototype than failing to present anything at all in pursuit of perfection. You are working on a deadline, which is why you must first get a working prototype out first and then improve upon it if time allows. There is a trick though, and that is being able to implement 90% of your solution before the hackathon will contribute vastly towards your experience working there. This leads us to the most important part.

Remember that quote from Megamind about the difference between a villain and a supervillain? That pretty much the case here too. It's all about presentation. That and holding up to cross examination by the judges. So be prepared to make the best presentation you can. Keep it simple and short. And if it doesn't impress you, it definitely won't be impressing the judges. Also, focus on the best aspects of your idea; that's what the demo is for, to showcase your idea. And don't show everything all at once. Hackathons usually have multiple rounds, and showing everything in the first round makes your project seem less impressive because it gives the impression of not making any progress. This is especially the case when there are changes made to the problem statement.

-Shridhar Shriram
IV year, ECE-B



SOOO MANY SNACKSSS, SOOO LITTLE TIME

A quirky reference to my favourite anti-hero, Venom. In fact, this is something which almost everyone of us would have felt in college: so many student clubs of our interest, so many interesting competitions, so many subjects to study, so many assignments and projects to complete, so many friends to catch up with, so many ideas to discuss about, and the list goes on. However, we know what happens next; that's right, we end up doing nothing productive atthe end of the day.

One day, you get the motivation to complete that long-pending record work. The next moment you know, you end up watching reels in instagram, or that dear friend of yours calls you to make plans for the weekend (for which you would have allocated the entire 3 weeks of portions to catch up on, but not anymore right?). On other days, you go all out and spend the entire evening watching that interesting series in Netflix, or complete the anime before your 'mangareader' friends could give you spoilers, or play a ranked game with your friends in your server vc
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Before you could even realise, you get your CAT exam schedule, starting next week. You get tensed and freak out in your class gang's WhatsApp group. All the rants in those groups start with the humble "Guys, I didn't even start studying yet!" and goes to "bro, I haven't taken running notes for that subject even a single day!". That is when you know that SSN is infested with snakes (get the metaphor right, please). With 2 days more to go for your exam, the WhatsApp class groups get flooded with previous years' question papers, study materials of seniors and other classes, youtube channel suggestions, 'Send this sticker to 10 groups or you will fail this semester' stickers, and what not. Again, sooo many things to study, sooo little time.

Sleepless nights, scavenging for important questions, drilling out insider info about the exam from other classes, and, the last-minute study, the post-exam enlightement where you would now be losing 2 marks, the nerve-wrecking paper discussion (and of course, the urge to vanish from this world when you realise that you made a mistake, thanks to your so-called 'friend' for pointing that out) and bunking classes to study for the exam next day - feels too relatable that you now want to move on to the next paragraph. Let's do that now, shall we?

After one roller-coaster of a week, you finally come back to face the reality again. Your project mentor asks you to give updates on your IFP project (which you haven't bothered to work on for the past 2 months). You then call up your project team mates to work on that again after a long time. Magically, you now have 3 pending lms submissions, 2 assignments due at 12:00 am (basically the previous night but the date always confuses us, doesn't it?), a presentation to do right after the short break the next day, and a hackathon idea presentation to submit by the weekend.

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After one roller-coaster of a week, you finally come back to face the reality again. Your project mentor asks you to give updates on your IFP project (which you haven't bothered to work After barely surviving the week, you step into the next week and get the much needed clarity: you have to focus on strengthening your fundamentals in your core subjects; you have to work on projects that will look nice in your resume; you have to work on publishing a research paper to put forward a strong 'pick me' message loud and clear to those top-tier foreign universities.

Right before you could start off with your new regime of self-improvement, you open LinkedIn to accept 4 new connections. That is when you start regretting watching that wretched Netflix series; your classmate posted his/her projects, certificates, hackathons, volunteering services photos and videos, fellowship and internship opportunity and all kinds of things to make you feel miserable about yourself that entire evening. You question yourself about your self-worth, your knowledge, and your innate ability to procrastinate.

You make up your mind again, but this time, determined to not let anything bring you down from your goal to develop your skills. You check out free courses in Udemy and Youtube, save the playlist and start watching them with your full concentration. After some time, you find the videos to be too slow for your pace and so, you start watching it in 2x speed. Slowly, you start realising that you actually like that topic. You become more interested in it and you go beyond what was asked in the Youtube tutorials to do as practice questions. You start experimenting with your small implementation, playing with the variables in the project, predicting what could be the outcome before running the implementation. You now realise that you have a flair for that topic. Your passion for that topic/subject grows and grows with every new implementation that you make and you just can't wait to share your journey in this topic with your friends. "Why not use this concept in this situation?"; a small idea springs up in that inquisitive brain of yours. A plan comes to your imagination, as to how to proceed with it. You try out a tiny implementation of your idea but the results aren't up to the mark. After tweaking it and repeating the process again and again, the results start improving and you slowly expand it to your main idea. The process repeats itself; poor results, tweaking it, slightly improved results, tweaking it further,...

Fast forward to a few months: you go on to bag prizes from various competitions and start working on whitepapers and mini projects along with different professors in our college. You get to attend your first professional academic conference and guess what: you are right out there in the world of academia; explaining about your idea and your paper. Now, you open that LinkedIn website in your laptop and start typing out your personal account which exceeds the length of this article. Look how the tables turned!

That is how our progress in college is: you meet your first setback, then you change your strategy, after which you slightly improve while keeping in mind the reason behind that small setback. Then you make more changes, slightly improve again, and persist on improving yourself day after day. We are bound to learn life that way as we have chosen to take the 'engineer's path'. We identify our problems, analysis it, test it, get temporarily stuck with minor setbacks, but we always find a way out of it.

The main intention of this write-up is to convey to you, my dear readers, that the feeling of hopelessness, self-doubt, fear and desperation is common to everyone and yes, almost everyone is looking for a way to escape that endless void. We all have a chance to explore, to come up with ideas, to work on our passion and of course, to dream BIG. On that note, I leave you all to do what you are destined to shine in. Signing off!

- Ajitessh R
II year, ECE-A

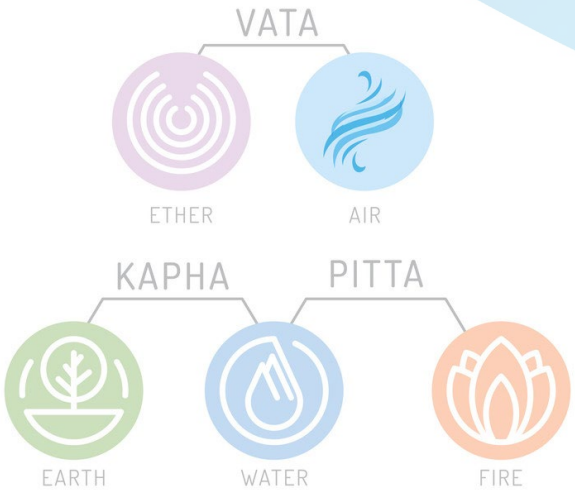
IGNITE YOUR DRIVE

Honestly, let's face it, motivational speeches don't really work for the most of us. Sure, they might get us all pumped up for a little while, but that energy is short-lived, just a quick burst of enthusiasm that fades away.

Why?

The reason is simple-There is no universal solution for motivation. Motivation is not a one-size-fits-all concept. Every single individual has different types of cognitive styles, and to stay motivated in the long run, they should play the cards that they have been dealt.
But the question is, what cards have you been dealt? What kind of cognitive style are you? It can be explained with Doshas.

According to Ayurveda, a dosha is a fundamental aspect of the human body-mind constitution. Ayurveda believes that the five elements—earth, water, fire, air, and ether—combine in the body to form three primary doshas: Vata, Pitta, and Kapha. These doshas are responsible for governing various physiological and psychological functions in the body.
Every individual is a mix of these three doshas, but generally one of the doshas tends to be dominant. Each of these doshas has its own strengths and weaknesses and the key to stay motivated is to play to your strengths rather than trying to become someone else.
I suggest you take a small test on the internet and find out your dominant doshas before reading further.



PITTA

Pitta is a mix of fire and water. Individuals with a lot of Pitta are often strong, athletic, and natural leaders. They're super motivated, always setting goals, and love a good competition.

Pittas usually have a steady pace in life. Our society is set up for them—they like a stable workday with regular schedules, and they're really ambitious. In today's world, those who are not naturally Pittas try to emulate them because they seem successful. But it's important to know they are different.

As, the saying goes, "The brightest candles burn out the fastest." Pittas need to be careful not to overwork and burn out because their ambition can be too much for their stamina. Pittas should learn to say "No" and not take on too much, as it can backfire.

One major pitfall for Pittas is that their driven nature can lead to fights and conflicts with others at work. They might waste time and energy on arguments instead of finishing tasks. So, if you're not naturally a Pitta, understand that not everyone has the same motivation style.

VATA

Vata consists mostly of the two elements: air and space. Individuals with a lot of Vata are usually seen as slim, full of energy, and really creative. They're known for thinking in unique ways but might get easily distracted. Their mind is like the wind, often changing directions. Their life seems like hundreds of wells dug one foot deep rather than one well dug a hundred feet deep. They get excited about things, but most often, they get bored of them soon. Most Vatas complain about this, but they must understand that this is simply how their brains work. They cannot try to be like a Pitta; it would not work for them. Today, there might be a lot more Vatas because of the use of electronic devices resulting in the reduction of attention spans.

What works best for a Vata?

It is true that a Vata gets easily bored, but it is also true that it is easy for a Vata to get re-excited about things. Trying to rotate what they are working on would do wonders for them.
The most common mistake a Vata makes is jumping from activity to activity and never following through. Instead, they should try rotation. Maybe they start learning a language this week, but they switch to cooking next week because they are bored of language learning. Instead of jumping to a new skill the week after that, they should try to return to language learning; they would surely be re-energized for it again.

If you are a Vata, it's alright if your schedule is all over the place. Have frequent breaks. Vatas are sprinters and not marathon runners.

Break your day into short sprints. Do some college work, maybe learn to play an instrument for a bit, and try your hand at drawing if you feel like it. Then, circle back to your college work later.
One major pitfall of a Vata is anxiety since their mind is dynamic; they anticipate different kinds of problems too. But it would not be too much of a problem since their mind soon gets bored of worrying too and would jump to do other stuff.

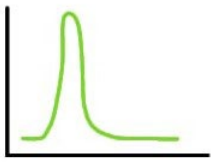
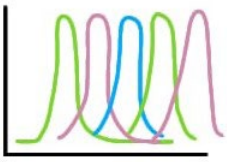
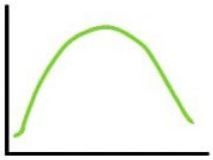
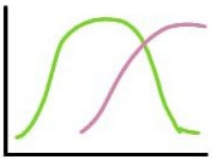
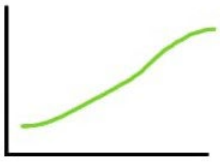
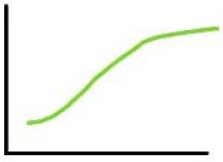
KAPHA

Kaphas are earth and water types; they are resilient. Individuals with this dosha are described as strong, thick-boned, and caring. They're known for keeping things together and being a support system for others. They are marathon runners. Their motivation is slow to start but reaches its top speed; they have low acceleration but high top speed, unlike Vatas who have high acceleration but low top speed.

Kaphas learn slowly but also forget slowly, while Vatas learn quickly but also forget quickly. You can think of Kaphas as late bloomers.
One major pitfall of a Kapha is that they tend to be very self-critical, often giving up at the worst possible moment.

If you are a Kapha, be patient. When you figure things out, you figure them out completely, and you will do amazing work right at the moment of success. Being patient is an important skill for a Kapha. Remember, "Slow and steady wins the race".

The diagram below perfectly depicts the motivational curves of different doshas, different colors represent different tasks.

DOSHA	MOTIVATION	OPTIMIZATION
VATA		
PITTA		
KAPHA		

Finally, to stay motivated, the very first thing you need to do is stop comparing yourself. Analyse yourself, know your dosha—Pitta (ambitious), Vata (creative but easily bored), or Kapha (steady and patient). Tailor strategies to your style for lasting motivation and success.

-Gowshika J
II year, ECE-A

AN ANTI-DISASTER DIVE: DISCIPLINE & DETERMINATION

Discipline and Determination, not exactly the DnD reference we were hoping for, yet it is one we are in dire need of. Discipline – a word we shudder to hear of. It brings back pleasant memories of our Sargent, I meant Dad, when he tried to teach us 3rd semester math in 3rd grade. I feel, it was for the best that he tried so, because frankly? I do not have a clue what 3rd semester math was really about.

Discipline is the key skill that transforms chaos into order, procrastination into productivity, and prevents our lives from turning into an unruly circus.. And a circus with some semblance of order would be quite a high bar to aim for, without it.

Discipline is convincing yourself to do something you don't want to. It's like staying focused during a Monday morning lecture or meditating with caffeinated squirrels. Staying disciplined is like taking the expressway to your goal. You need to walk the thorny path without wavering, but at least you get to enjoy the journey and be proud of your commitment. Side quests are called side quests for a reason.

Often times, people confuse this 3-syllable word with wearing horse blinders, but that in fact is entirely against the concept we seek here. Horse blinders are used to keep a horse, or in this case, Us on track. And they do so, by forcibly shielding away possible distractions that we may encounter on path. That may work in the short run, but should we really have to hide away from these possible deviations to be able to reach our goal? The answer to that is a resounding No. To be able to reach our goal despite the pitstops and all the tea-breaks available to us is what Discipline truly embodies.

Now enough about discipline, let us move over to the other side of the coin, Determination.A beautiful quote by the renowned American football coach Vince Lombardi that emphasizes on the pivotal role determination plays in the journey to success, "There's only one way to succeed in anything and that is to give it everything." captures the very essence of this subject.

Determination, often described as the firmness of purpose and the resolve to achieve a goal, is the driving force behind every remarkable achievement. Be that the 90+ attendance in your Tamil class or the successful juggling of assignments and mini projects you managed to finish in half a night. Lombardi's words remind us that success is not a passive endeavour; it demands our full commitment, a dedication that goes beyond mere wishful thinking. It leaves no room for half-hearted efforts.

It is the relentless pursuit of improvement. It's about bouncing back from failures, learning from mistakes, and persisting when the journey gets tough. When the going gets tough, the tough get going. And finally, Determination is that linchpin, that secret that turns dreams into reality.

- Divya Jha
II year, ECE-A

A JOB IS TO PAY YOUR RENT

(Poetry dissecting the isolation of an artist chained by the monotonous drudgery of the corporal world.)

A wandering soul adrift,
An artist bound by fate's unfathomed sway,
In paths diverged, the heart's burdened shift,
In a world devoid of vibrant play.

Forced into caskets of pragmatism's lore,
A sought reality veils passions held galore,
The canvas whispers, heart's unrest implores,
Yet chained by burdens far too heavy to score.

Melancholic shadows cloak the mind's eye,
Dreams drowned in the bleakness of routine,
A spirit yearning, attempting to fly,
But confined by obligations unseen.

In these halls where echoes drone on and on,
The artist's sighs mingle with stifled breath,
Their heartstrings strummed by a dissonant song,
A discordant tune, a dance with death.

Dark musings swirl in a tempest's might,
As disillusionment cascades in waves,
The soul's palette dimmed, devoid of light,
Amidst the labyrinth, lost in endless graves.

Each lecture note, a painful refrain,
A symphony of dissonance and woe,
In yearning heart, an unspoken pain,
As aspirations linger; trapped below.

The corporate world's shadow looms; austere,
Ensnaring dreams in chains of practicality,
While the artist's essence sheds a tear,
In the absence of grounded actuality.

So let the melancholy weave its thread,
In the tapestry of an artist's rue,
For in this sorrow, aspirations tread,
Striving to break the chains, renew.

Though shrouded in dark rogue, a glimmer gleams,
A yearning soul, resilient, yet to soar,
Seeking a path beyond academic schemes,
Awaiting liberation, craving more.

- Rupadharshini R
II year, ECE-B

Can Dreams Transcend the Graded Horizon?

Amidst the bastions of academia, where wisdom flows,
A truth concealed, a secret that only wisdom knows,
Where grades and marks form learned leaves,
Beyond the confines of a numbered score, wisdom weaves.

In volumes weighty and lectures prolonged,
Where facts and figures gracefully respond,
There holds a truth, grades can't persuade,
A hidden trail where dreams are laid.

In lectures trance and textbooks parade,
The question rattles, refusing to fade.
How long will you chase the marks so high,
With teachers shadows passing by?

Books may guide with wisdom's grace,
Yet dreams paint life in vibrant space.
In the canvas of aspirations, bold and wide,
Follow the dreams that swell inside.

For in the journey post-college's gate,
Opportunities stand at your fate.
Placements and internships, a waiting band,
Yet, it's smart work and hard work, the keys in your hand.

Masters and prospects, a horizon wide,
But the path is paved with the strides you decide.
Beyond the grades, in the fields you stand,
Smart work and hard work, the architects planned.

In the silence that follows, the question roars,
A challenge, a call, shaking the shores.
How long, dear dreamer, will you delay,
Before your ambition defines the course you sway?

So, as you step into futures unknown,
Let passion be the pulse in every zone.
For in the grand finale, where destiny lands,
Passion and dreams, the blockbuster strands

-Shruti Chandrasekar
II year, ECE-B