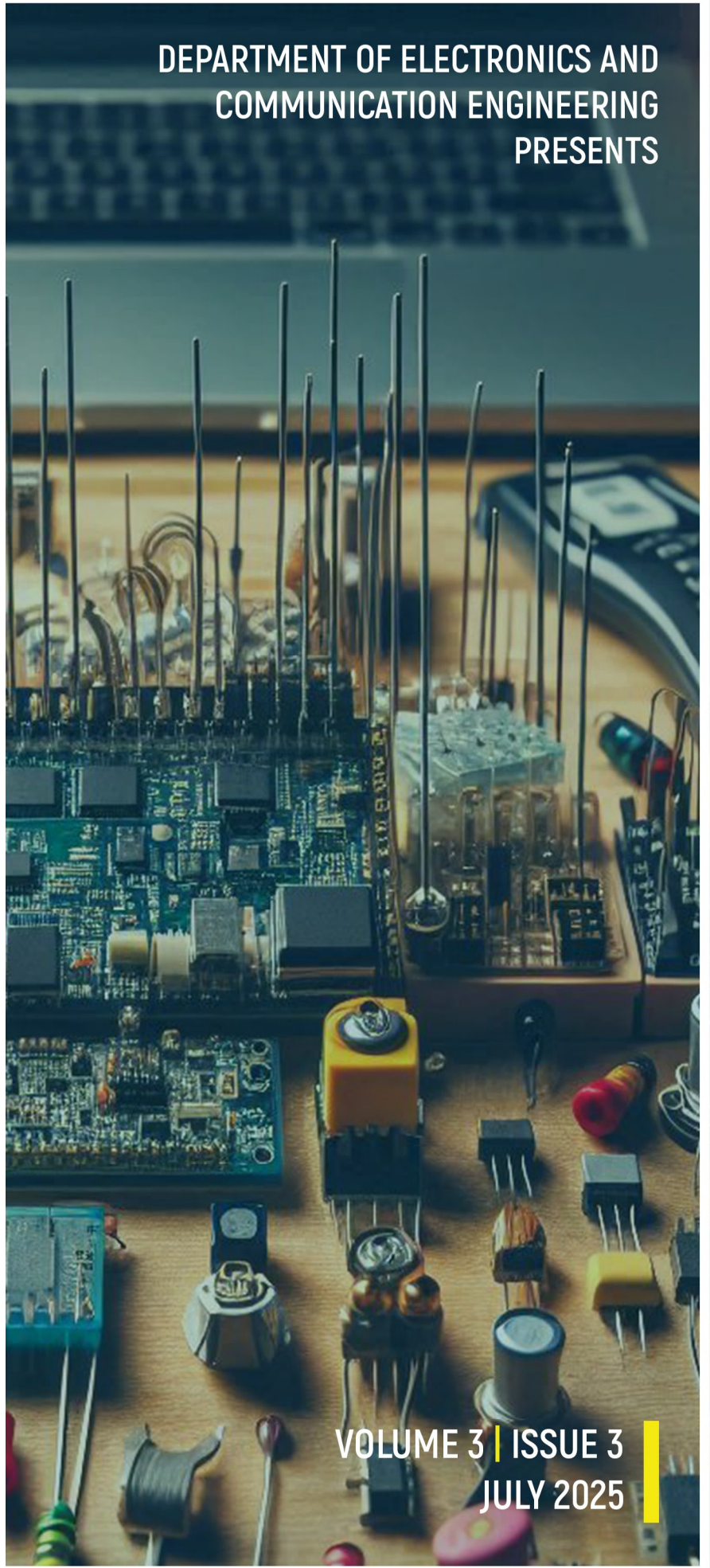


FORWARD

DEPARTMENT OF ELECTRONICS AND
COMMUNICATION ENGINEERING
PRESENTS

VOLUME 3 | ISSUE 3
JULY 2025



WHERE CREATIVITY MEETS TECHNOLOGY

VISION

- ◆ To produce professionally competent, ethically sound and socially responsible Electronics and Communication Engineers.

MISSION

- ◆ Provide excellent infrastructure and lab facilities for quality education.
- ◆ Promote industry-academic interactions to keep up with technological advancements.
- ◆ Develop interpersonal skills and social responsibility among students through project-based and team-based learning.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- ◆ Exemplify technical competence in designing, analyzing, testing and fabricating electronic circuits.
- ◆ Acquire leadership qualities, rapport, communication skills in the organization and adapt to changing professional and societal needs.
- ◆ Work effectively as individuals and as team members in multidisciplinary projects

PROGRAM SPECIFIC OUTCOMES (PSOs)

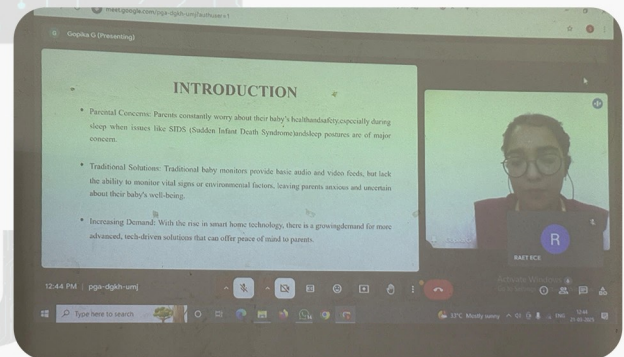
- ◆ Define, design, implement, model, and test electronic circuits and systems that perform signal processing functions.
- ◆ Segregate and select appropriate technologies for implementation of a modern communication system.

PROGRAM OUTCOMES (POs)

- ◆ **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- ◆ **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- ◆ **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- ◆ **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- ◆ **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- ◆ **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- ◆ **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- ◆ **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- ◆ **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- ◆ **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- ◆ **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- ◆ **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

NATIONAL CONFERENCE ON RECENT ADVANCEMENTS IN ENGINEERING AND TECHNOLOGY (RAET 25)

◆ On March 21 and 22, 2025, the First National Conference on Recent Advancements in Engineering and Technology (RAET 25) was successfully conducted, bringing together over 80 teams from academia and industry to present their research papers on the latest developments in engineering and technology. The conference was collaboratively organized by Impulse (Electronics Department Association), GeekZone (Computer Science Department Association), Sattva (Civil Department Association), and ARMS (Mechanical Department Association). As a national-level platform, RAET 25 fostered knowledge exchange, interdisciplinary collaboration, and insightful discussions on emerging trends and innovations. The event served as a valuable opportunity for students, researchers, and professionals to showcase their work and engage with experts from diverse technical backgrounds.





National Level Techno-Cultural Fest

As part of XTASY 2k25 the following technical events were organised by the Department of Electronics and Communication Engineering

CIRCURE:

ANALYZE THE CIRCUIT, DETECT AND CORRECT ANY ERRORS

◆ Participants were tasked with analyzing a provided circuit, identifying any errors, and rectifying any detected issues.



HOBBYCUIT:

TIMED CIRCUIT CHALLENGE TO TEST YOUR ELECTRONICS SKILLS.

Each team was given four circuit tasks to complete within a limited time frame, testing their technical skills and problem-solving abilities.



TRACKWHACK:

ASSEMBLE THE ROBO, WIN THE RACE

◆ A contest called "TrackWhack" was held, where competitors were tasked with assembling designated parts to construct a robot, thus improving their technical expertise.



MELTDOWN:

ANALYZE THE CIRCUIT, DETECT AND CORRECT ANY ERRORS

◆ Participants were invited to demonstrate their exceptional skills by joining electronic components through the artful technique of soldering.



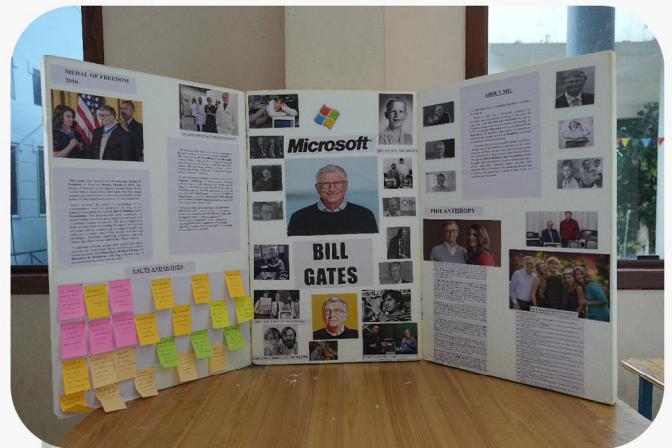
CODEMEND:

FINDING AND FIXING ERRORS OR BUGS IN THE SOURCE CODE

◆ As a central highlight of XTASY'25, Codemend was held for students, challenging them to identify and resolve bugs within the source code



INSTALLATIONS



OHMRAID:

CRACK CLUES, CONNECT CIRCUITS — A TREASURE HUNT FOR THE TECH-SAVVY.

◆ Ohm Raid put tech enthusiasts to the test to decode clues and assemble circuits in a race for the ultimate treasure.



INTERNSHIPS

FOUNDATIONS IN EMBEDDED SYSTEM AND LAB PRACTICES

◆ From June 10, 2025, the Department of Electronics and Communication Engineering (ECE) organized a three-week internship titled "Foundations in Embedded System and Lab Practices" for the second-semester students of the 2024–2028 batch. The training sessions were led by Mr. Manu Thomas, Assistant Professor, Department of ECE, and Mr. Rahul V. A, Assistant Professor, Department of Applied Science and Humanities.



IOT AND WEB DEVELOPMENT INTERNSHIP

◆ S4 and S6 Electronics and Communication Engineering students took part in a one-month internship on IoT and Web Development, held at IIIT Kottayam and jointly organized by the IEEE Signal Processing Society Kerala Chapter and the Gyaan Innovation Lab, beginning on June 10, 2025.



INDUSTRY-ORIENTED INTERNSHIP AT NTTF, THALASSERY

◆ S6 students from the ECE department engaged in a month-long internship program at NTTF, Thalassery, which began on June 9, 2025, providing them with practical exposure to industry-relevant skills.



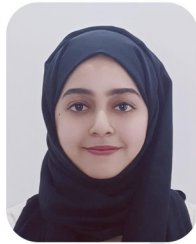
MEMORANDUM OF UNDERSTANDING FOR INDUSTRY ON CAMPUS

◆ A Memorandum of Understanding (MoU) was signed between Thinkfotech and Department of Electronics and Communication Engineering for Industry on Campus (IoC) on March 27, 2025.



DEPARTMENT TOPPERS

S7



K Sana Fathima



Erin Ruksheed



Abhay Rithik



Fasmira Ismail



**Sheik Muhd.
Sahad**



**P Mohammed
Iymen Irshad**

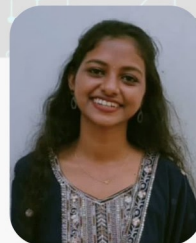
S5



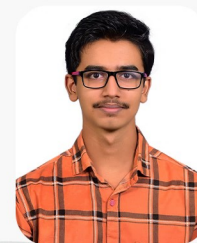
Marjana T



Amshiga Ranjith



Jyothika V



Anujith K

S3



Samanyu N Jils



Muhd. Mishal P



Diya A P



Muhd. Yasir A C



Alen M

ACHIEVEMENTS

STAFF ACHIEVEMENTS

◆ Mrs. Athira V, Mr. Manu Thomas, Mrs. Sreetha Sreedhar K and Ms. Arya C, Assistant Professors, Department of ECE, participated in a five-day online Faculty Development Programme (FDP) on “Innovative Trends in VLSI, IoT and Communication Technologies for Modern Applications” organized by the Department of Electronics and Communication Engineering, Jyothi Engineering College, from April 21 to April 25, 2025.

◆ Mr. Nithin C and Dr. Anetha Mary Soman participated in a six-day Faculty Development Program (FDP) on “Future Proofing Research Using AI Tools,” organized by the Department of Electronics and Communication Engineering, College of Engineering Vadakara, from April 21 to April 26, 2025.

◆ Dr. Anetha Mary Soman participated in a five-day Short Term Training Program (STTP) on “Coding Techniques for 5G and Beyond,” conducted by the Department of Electronics and Communication Engineering, National Institute of Technology Calicut, from June 30 to July 4, 2025.

STUDENT ACHIEVEMENTS

◆ Navaneeth Narayanan of 2022-26 batch was recognized as the second-best intern at the IEEE Education Society Kerala Chapter for the term 2024–2025 and was selected as the Designer for the Student Leadership Team for the term 2025–2026.

◆ Navaneeth Narayanan and Anujith K from the 2022–26 ECE batch attended a workshop on Advanced Drone Technology (Air Taxi), conducted by India Space Lab in association with India Space Week.

◆ Abhinav Anil from the 2023–27 batch was selected to represent the KTU Volleyball team.

NPTEL ACHIEVEMENT

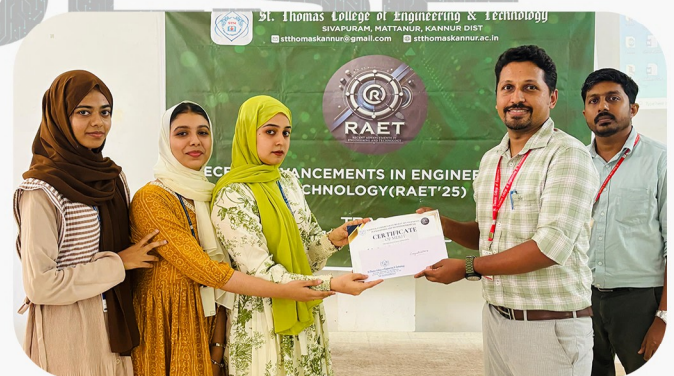
◆ Anujith K of 2022-26 batch has successfully completed NPTEL course on CMOS digital VLSI design.



Anujith K

VICTORY IN VISION

◆ Erin Ruksheed, K Sana Fathima and Fasmira Ismail, 8th semester ECE students, secured the Best Paper prize in National Conference on Recent Advancement in Engineering and Technology (RAET'25), organized by St. Thomas College of Engineering and Technology, Kannur on March 21 - 22, 2025.



INNOVATING FORWARD

◆ Two teams from the Department of Electronics and Communication Engineering have successfully advanced to the second round of UST SIGHT 2.0 with their projects. The first team — Anujith K, Gopika Latheesh, Abhinrag K, and Mohammed Fazil K.V — was guided by Ms. Arya C, while the second team — Sana Fathima K., Erin Ruksheed, and Fasmira Ismail (S8 ECE) — was mentored by Mr. Manu Thomas.

STUDENT RESEARCH SPOTLIGHT

◆ K Sana Fathima, Erin Ruksheed, and Fasmira Ismail, under the guidance of Mr. Manu Thomas, successfully published their research paper titled “PILLPORT: An IoT Based Automated Medicine Dispenser” in Volume 10, Issue 5 (May 2025) of the International Journal for Research Trends and Innovation (IJRTI) and in International Journal of Engineering Technology and Sciences (IJETS).

◆ Sheik Muhammad Sahad, Abhay Rithik and Sana T P under the guidance of Mrs. Sreetha Sreedhar K, and Mr. Nithin C successfully published their research paper titled “Fishify - An IoT Water Monitoring, Treatment, and Feeding Sysytem” in Volume 10, Issue 5 (May 2025) of the International Journal for Research Trends and Innovation (IJRTI) and in International Journal of Engineering Technology and Sciences (IJETS).

◆ K Sana Fathima, Erin Ruksheed, and Fasmira Ismail, under the guidance of Mr. Manu Thomas, successfully published their research paper titled “PILLPORT: An IoT Based Automated Medicine Dispenser” in the International Journal of Engineering Technology and Sciences (IJETS).

◆ P Muhammed Iymen Irshad, Amith A K, and Anugrah M under the guidance of Mr. Athira V, successfully published their research paper titled “ARMS-Automated Ration Shop with RFID based ration card and IoT” in the International Journal of Engineering Technology and Sciences (IJETS).

◆ Hridik N, Navaneeth Narayanan, Sourav K K, and Viswajith V V under the guidance of Mr. Manu Thomas, successfully published their research paper titled “IoT Based Smart Waste Management System” in the International Journal of Engineering Technology and Sciences (IJETS).

◆ Anujith K, Gopika Latheesh, Abhinrag K, and Mohammed Fazil K V under the guidance of Mr. Arya C, successfully published their research paper titled “Smart Garden System” in the International Journal of Engineering Technology and Sciences (IJETS).

PLACEMENTS



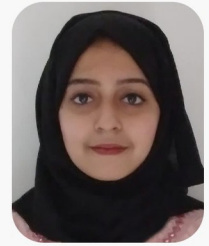
Abhay Rithik



Erin Ruksheed



Sana T P



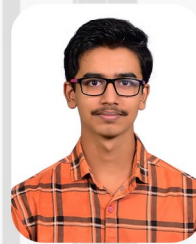
K Sana Fathima



Gopika Latheesh



Amshiga Ranjith



Anujith K



Navaneeth Narayanan



IMPULSE

EDITORIAL TEAM

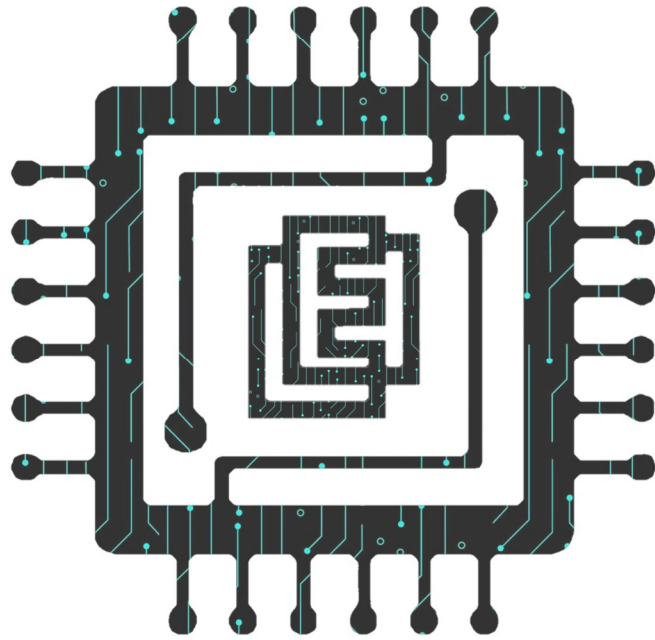
Mrs. Sreetha Sreedhar K (Asst. Prof)

Krishnendu S Nair (S7 ECE)

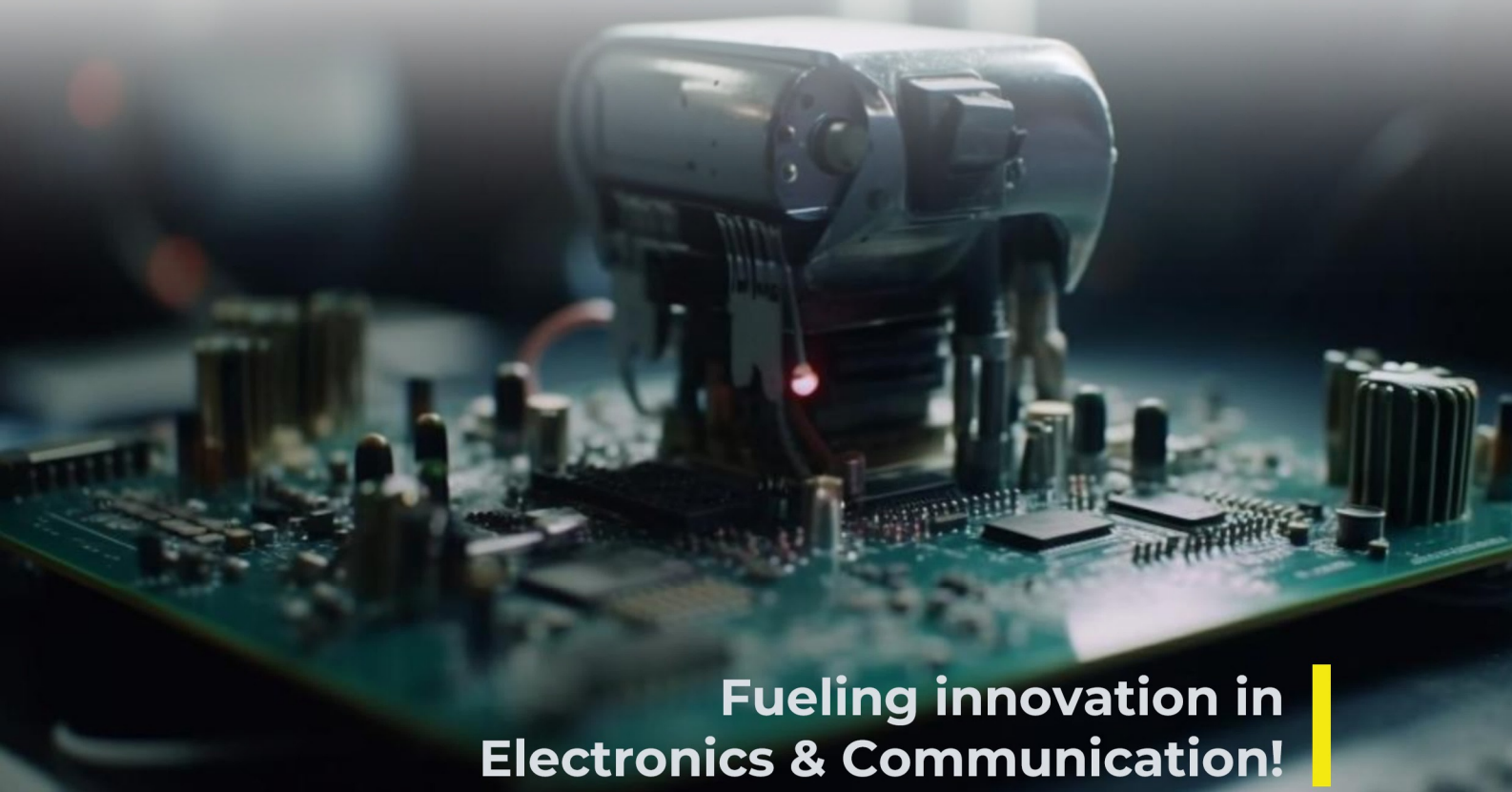
Navaneeth Narayanan (S7 ECE)

ECE
HERALD

📷 ece_association_stm



IMPULSE



**Fueling innovation in
Electronics & Communication!**