



St. XAVIER'S
CATHOLIC COLLEGE OF ENGINEERING
(Autonomous)

Chunkankadai, Nagercoil - 629003
Kanyakumari District, Tamil Nadu

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Accredited with 'A' Grade by NAAC
UG Programs(ECE, EEE, Mech, Civil, CSE & IT) Accredited by NBA
Anna University Recognized Research Institute
Recognized under section 2(f) & 12(B) of UGC Act, 1956
UG Programs(ECE, EEE, Mech, Civil, CSE & IT),
MBA & MCA Programs Permanently Affiliated

DEPARTMENT OF INFORMATION TECHNOLOGY

TechPulse

2025-2026 Vol. II - Issue III



PILGRIMS OF INNOVATION,ENGINEERS OF THE FUTURE:CHARTING A PATH OF EXCELLENCE



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2025-2026 Vol. II - Issue III



The Department of Information Technology offers an excellent atmosphere for students to learn and acquire the necessary skills demanded by the industry. The department has experienced faculty members who are fully committed to teaching and research and are specialized in various field of Information Technology. The students have access to well equipped, state-of-the-art laboratories with superb Internet facilities. A wide range of research activities undertaken in the department allow the students to gain contemporary knowledge about real-life problems in the industry. Professional activities like Symposium, Paper Presentation, Technical seminars are organized at regular intervals. Most of the students of our department are the members of technical bodies like IEEE, ISTE, CSI etc., Under the guidance of these faculty members the students are not only given a good exposure both in theory and practical but also a better way about How a human to be in our society.

This department also offers various value added training programs and international certification courses. The department has brought out outstanding engineers in the past and will continue in doing so in the years to come.

Salient Features

- Excellent record of academic achievement extending 25 years.
- Experienced and dedicated faculty with 6 Ph.D. holders and 4 pursuing Ph.D's Every classroom has a wall-mounted LCD.
- The project lab, IT lab, and computer center are designed to assist faculty and students in using computers and completing projects online.
- Every lab has air conditioning installed with the most recent system configurations.

Accredited By



HoD's Message

It gives me great pleasure to connect with you through this March 2026 edition of our Department Newsletter. This issue reflects the vibrant academic, research, and innovation-driven environment of our Department of Information Technology, showcasing a wide range of enriching activities and accomplishments.

The month of March has been marked by several significant events and initiatives. We proudly celebrated International Women's Day, recognizing the achievements and contributions of women in academia and technology. An IPR awareness programme was organized to enhance understanding of intellectual property rights, encouraging students and faculty to protect and promote their innovative ideas.

Our commitment to interdisciplinary research was strengthened through expert talks that inspired collaborative thinking across domains. Students gained valuable industry exposure through an industrial visit, bridging the gap between theoretical knowledge and real-world applications. The spirit of innovation and problem-solving was evident in the successful conduct of hackathons, where students showcased creativity and technical excellence.

This issue also highlights active student participation in paper presentations, project expos, and international workshops, reflecting their growing research aptitude and global exposure. We are especially proud of our students who have excelled in GATE 2026, bringing laurels to the department through their outstanding performance.

These activities collectively demonstrate our continuous efforts to foster innovation, research excellence, and holistic student development. I encourage all faculty members and students to actively engage in such initiatives and contribute to building a strong academic and research culture.

I sincerely appreciate the editorial team for their dedicated efforts in compiling this newsletter with clarity and professionalism. I also commend our faculty and students for their enthusiasm and commitment.

Let us continue to strive for excellence and achieve greater milestones in the months ahead.



DR. SUJA A. ALEX

Associate Professor & Head,
Department of Information Technology

International Women's Day Competitions

The Department of Information Technology, in association with BRIGITZ – Women's Wing, celebrated International Women's Day with great enthusiasm and active student participation. The event was organized under the theme “Rights, Justice, Action for All Women and Girls”, focusing on empowerment, equality, and leadership.



A variety of events were conducted to engage students and promote their talents, including a Poster Design Competition, a “Be the Leader” Tech Leadership Role Play Challenge, and a “Women in Tech – Innovation Pitch” competition. These activities provided a platform for students to express their creativity, leadership abilities, and innovative thinking. Participants showcased their ideas on technological advancements, women empowerment, and societal impact through visually appealing posters and compelling presentations.

The leadership role-play event encouraged students to simulate real-world scenarios, enhancing their decision-making, communication, and problem-solving skills. Meanwhile, the innovation pitch competition enabled participants to present tech-driven solutions, fostering entrepreneurial thinking and confidence.

The seminar helped students understand how modern analytics tools support entrepreneurial and business success. Students actively participated and gained valuable exposure to contemporary data analytics practices.

CONVENER:

Dr. Suja A. Alex
Associate Professor &
HoD / IT

COORDINATORS:

Mrs. P. Innasi Lineta
Assistant Professor / IT

FACULTY ADVISOR:

Dr. G. Geo Jenefer
Assistant Professor &
Faculty Advisor – BRIGITZ

IPR Awareness

Webinar on IPR for Engineers



As part of its curriculum enrichment initiatives, the Department of Information Technology organized a webinar on “IPR for Engineers: Filing, Protection, and Commercialization.” The session aimed to raise awareness among students about the importance of Intellectual Property Rights (IPR) in today’s innovation-driven world.

The webinar provided a comprehensive understanding of various forms of intellectual property, including patents, copyrights, trademarks, and industrial designs. Students were introduced to the step-by-step process of patent filing, documentation, and legal protection, along with the challenges involved in safeguarding innovations. The session also emphasized the commercialization aspect of intellectual property, explaining how innovative ideas can be transformed into viable products and business opportunities.

Practical examples and case studies were discussed to help students understand how IPR plays a crucial role in research, product development, and entrepreneurship. The session encouraged students to think creatively, protect their innovations, and explore opportunities in startups and technology-based enterprises.

CONVENER:

Dr. Suja A. Alex
Associate Professor &
HoD / IT

COORDINATORS:

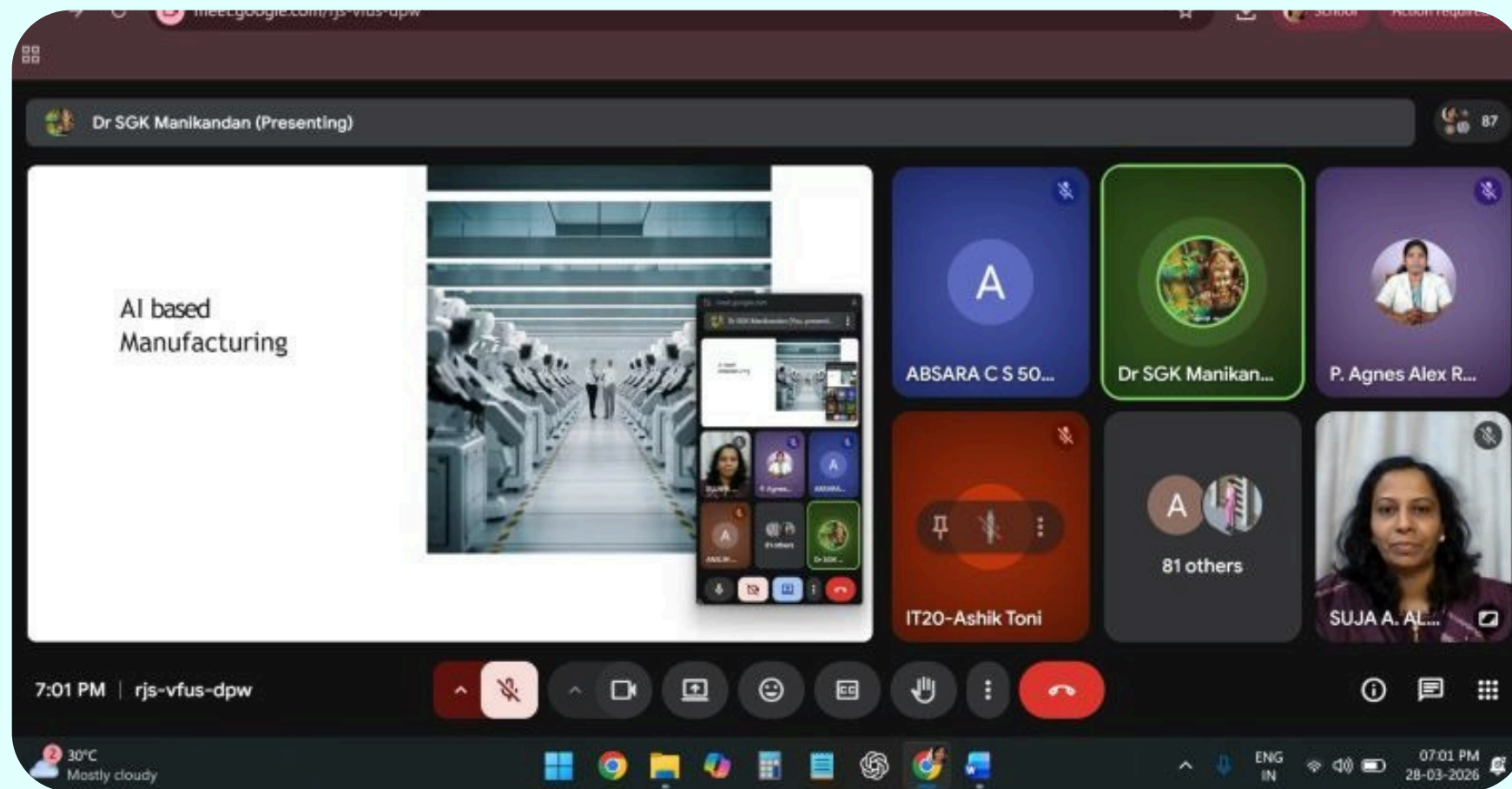
- **Dr. G. Sahaya Stalin Jose**
Assistant Professor / IT
- **Mr. A Arul Rex**
Assistant Professor &
Faculty Advisor

FACULTY ADVISOR:

Dr. G. Geo Jenefer
Assistant Professor &
Faculty Advisor – BRIGITZ

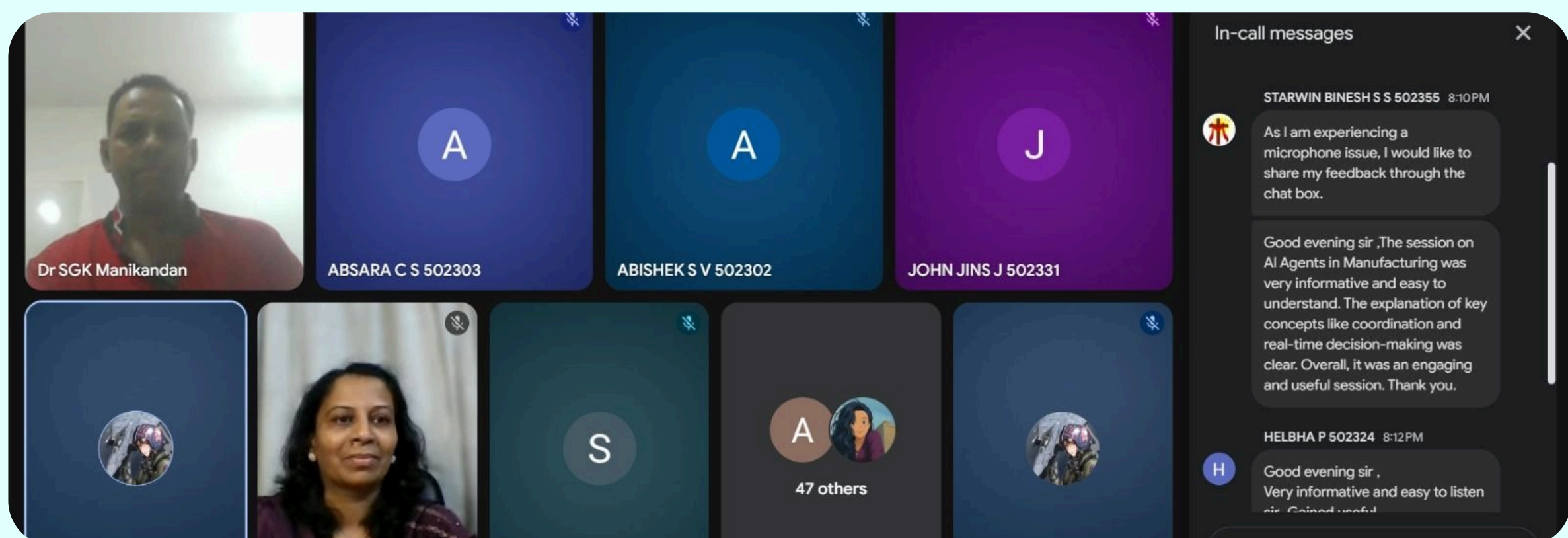
Interdisciplinary Research opportunities

Webinar – AI-based Manufacturing



The Department of Information Technology at St. Xavier's Catholic College of Engineering organized an interdisciplinary research webinar on AI-based Manufacturing as part of its continuous efforts toward curriculum enrichment and industry-oriented learning. The session was delivered by Dr. SGK Manikandan, General Manager and Scientist at ISRO, Liquid Propulsion Systems Centre.

The resource person provided an in-depth overview of how Artificial Intelligence is revolutionizing modern manufacturing systems. The session covered key concepts such as intelligent automation, predictive maintenance, quality control using machine learning, and the integration of AI with advanced materials and aerospace applications. Real-time case studies and industrial examples were discussed to illustrate how data-driven decision-making enhances efficiency, reduces costs, and improves product reliability.



CONVENER:

Dr. Suja A. Alex
Associate Professor &
HoD / IT

COORDINATORS:

- **Er. T. M. Angelin Monisha Sharean**
Assistant Professor &
AHoD / IT
- **Er. P. Agnes Alex Rathy**
Assistant Professor / IT

FACULTY ADVISOR:

Dr. G. Geo Jenefer
Assistant Professor &
Faculty Advisor – BRIGITZ

Industrial Visit



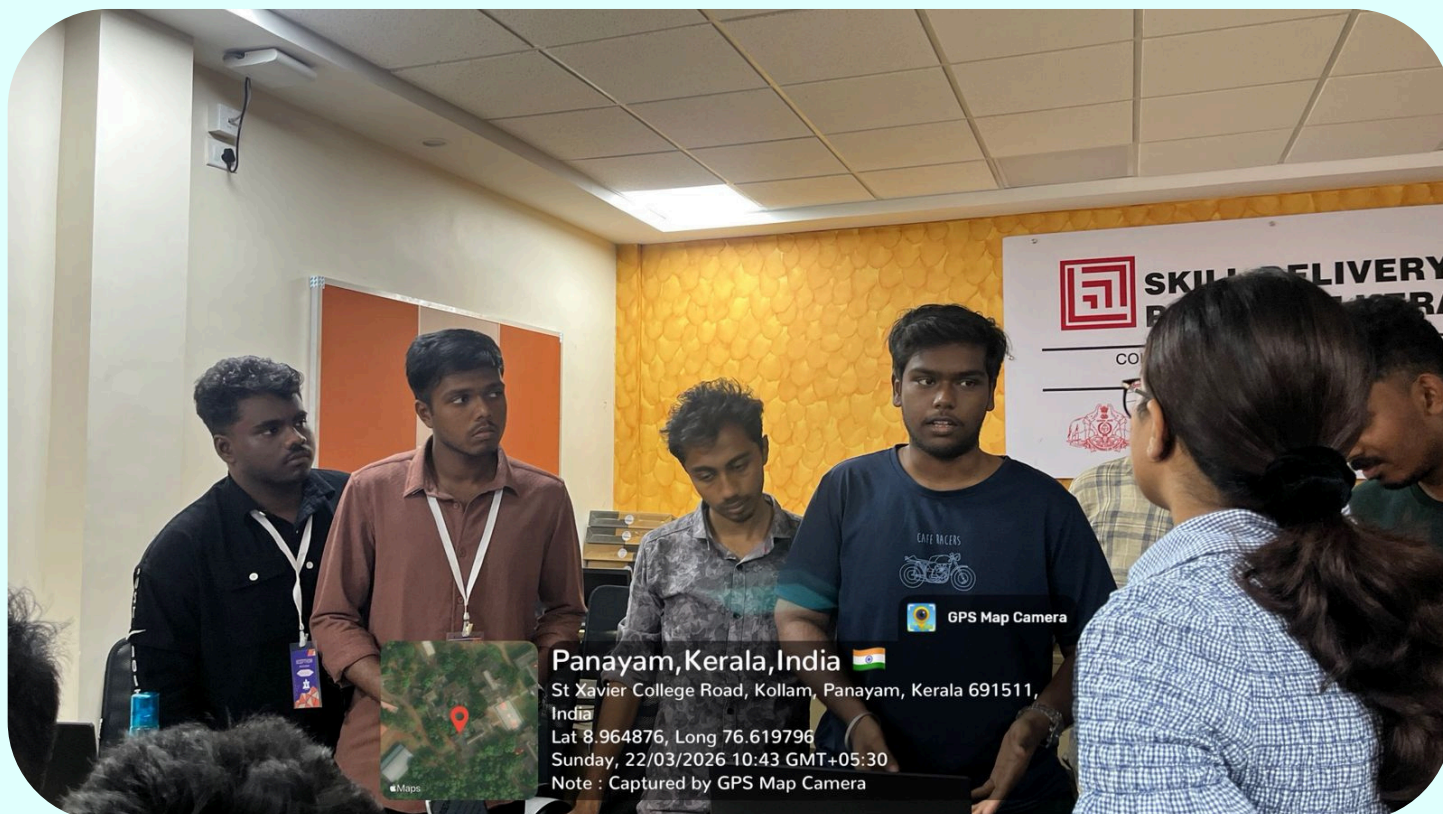
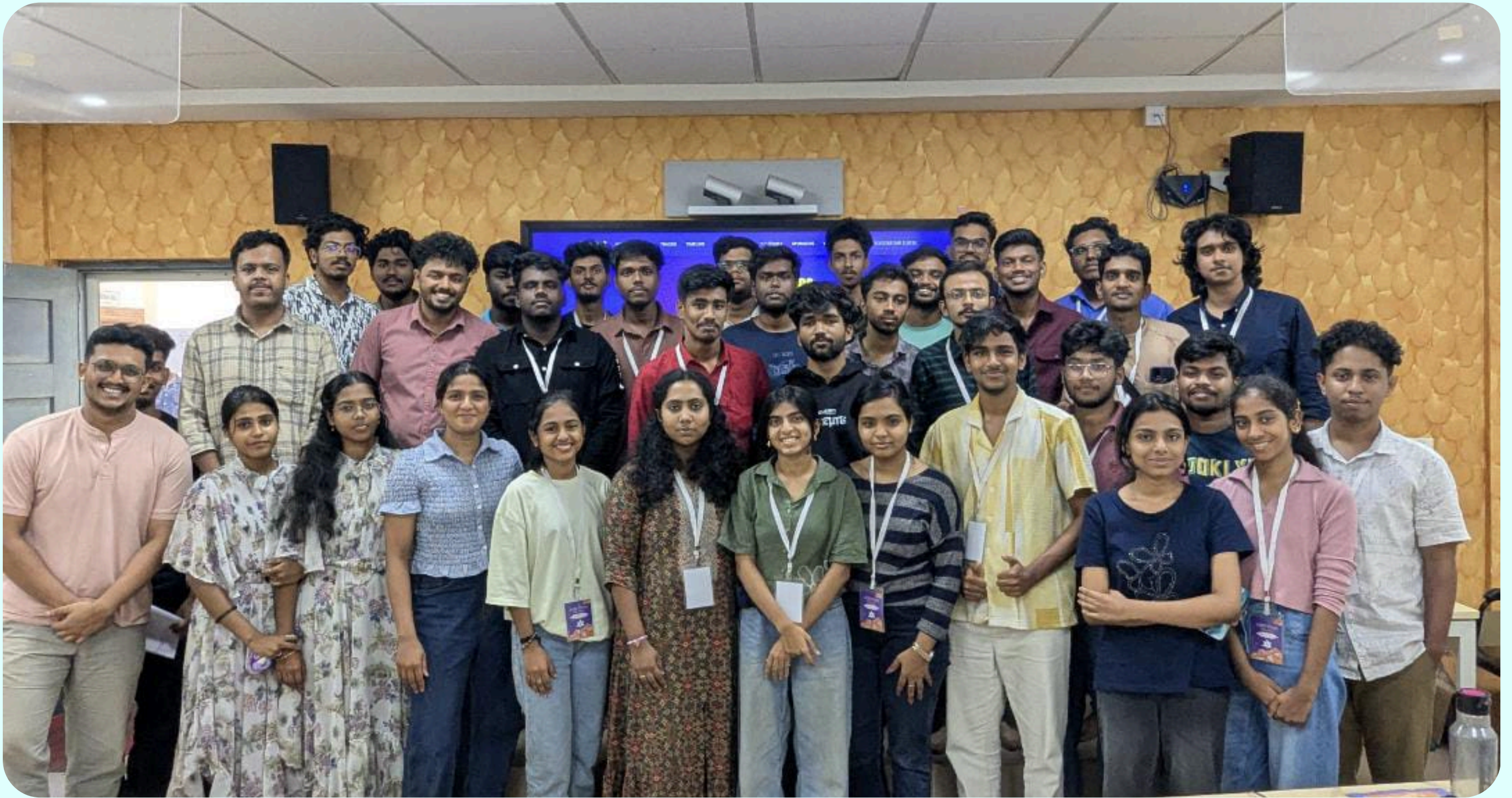
The Department of Information Technology successfully organized the II Year students a industrial visit to Srishti Innovative and Indian Space Research Organisation (ISRO) in Thiruvananthapuram. The visit was organized with the objective of providing students with practical exposure to industry practices and advanced technological environments.

During their visit to Srishti Innovative, students gained valuable insights into modern software development practices, particularly the Software Development Life Cycle (SDLC), and understood how structured methodologies are applied in real-world projects. Additionally, an interactive session on the evolution of Robotics enhanced their understanding of emerging technologies through practical examples.

At the Indian Space Research Organisation, students were introduced to India's advancements in space research and technology, offering them a broader perspective on innovation, scientific development, and national achievements in the field of space exploration.

We believe that such initiatives play a vital role in bridging the gap between academic learning and industry exposure. This industrial visit proved to be an enriching experience, inspiring students to strengthen their technical knowledge and prepare for future professional challenges.

Students Participation in Hackathon



Altrin Benser A, John Jins J, Jefrin J and Mukhilan S from III IT actively participated in the XCEPTON conducted by College of Engineering Perumon, held on 21st and 22nd March 2026.

Sara R A and Anushiah S from III IT actively participated in the XCEPTON conducted by College of Engineering Perumon, held on 21st and 22nd March 2026.



Students Participation in Hackathon



Helbha P, Absara C S and Sara R A from III IT participated in the National Level Hackathon - TNWISE 2026, organized by TNCAM in association with Periyar Maniammai Institute of Science & Technology, Thanjavur, held on 7th March 2026.

Ariya Sree S from II IT along with students from II Year ECE received 3rd prize of Rs.2000 cash prize for HackFest, organized by Hackathon Cell, St.Xavier's Catholic College of Engineering on 9th and 11th March 2026.

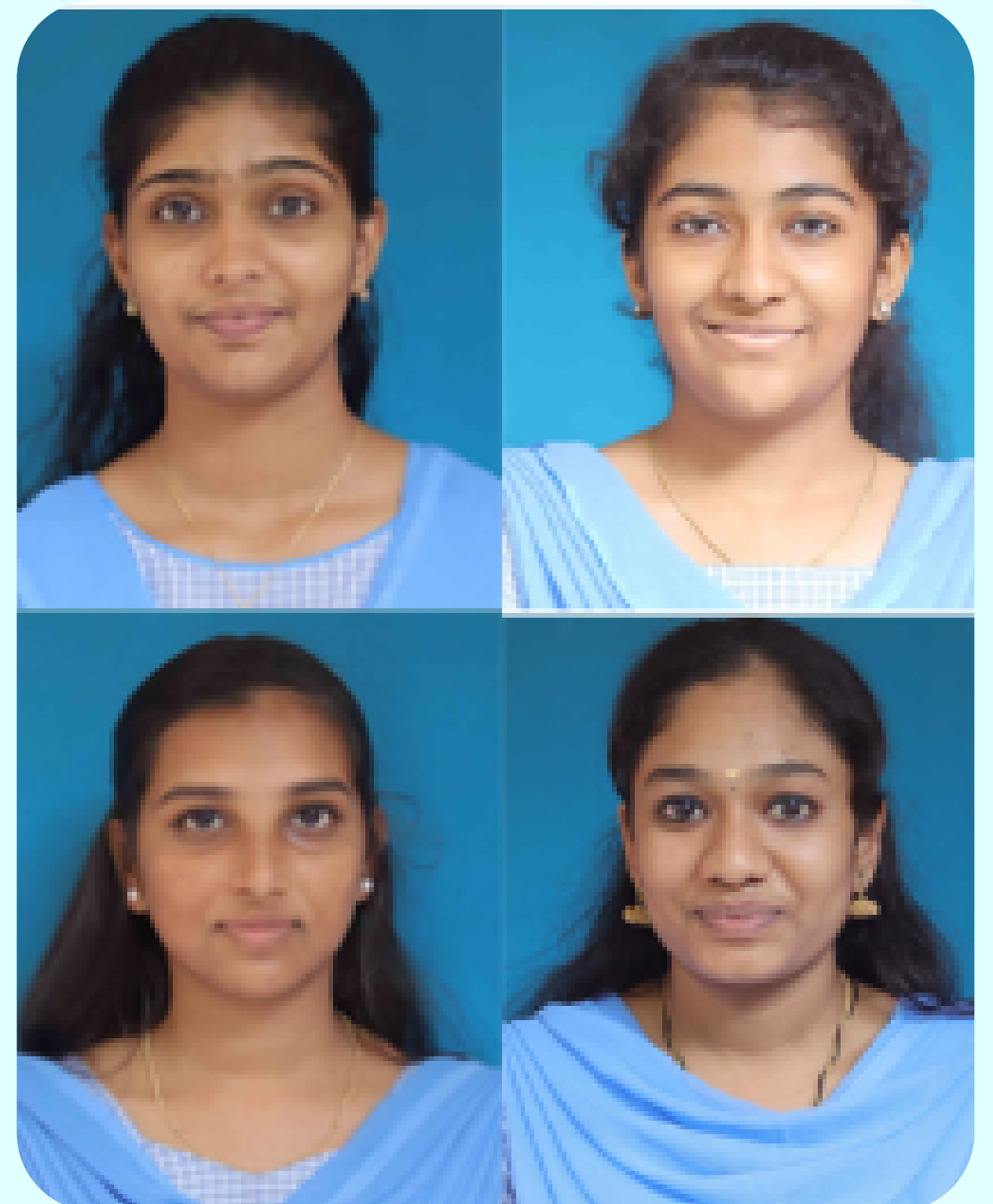


Paper Presented in Conference and Symposium



Sanjai R (502247) along with team members Beno B (502213), Fejo J S (502220), and Jenish J (502226) from Final Year presented a paper titled “EcoVerse: A Web-Based Interactive Platform for Real-Time Carbon Footprint Tracking and Personalized Sustainability Recommendation” at the 10th International Conference on Engineering Technology and Science (ICETS’ 26). The conference was organized by Muthayammal College of Engineering in association with Scientific.Net and ICTAcademy, and the presentation was delivered on 28-03-2026.

Lefana Rose A, along with team members Susi Melinda I, Madhumitha A S, and Athirsha A S from Final Year presented a paper titled “Hybrid Machine Learning and Optimal Assignment Model for Skill-Based Migrant Workforce Matching.” at the International Conference on Emerging and Transformative Technologies in Computer Science (ICETT-CS 2026), conducted by J.P. College of Engineering, on 11-03-2026.



Paper Presented in Conference and Symposium

Sanjai R (502247) along with team members Beno B (502213), Fejo J S (502220), and Jenish J (502226), from Final Year presented a paper titled “A Hybrid GNN-LSTM Deep Learning Framework for Vaccine Hesitancy Prediction” at the 14th International Conference on Contemporary Engineering and Technology 2026 (ICCET 2026). This conference was organized by the Organization of Science & Innovative Engineering and Technology (OSIET), Samarkand State University (Uzbekistan), and Prince Shri Venkateshwara Padmavathy Engineering College, and the presentation took place on 22nd and 23rd March 2026.



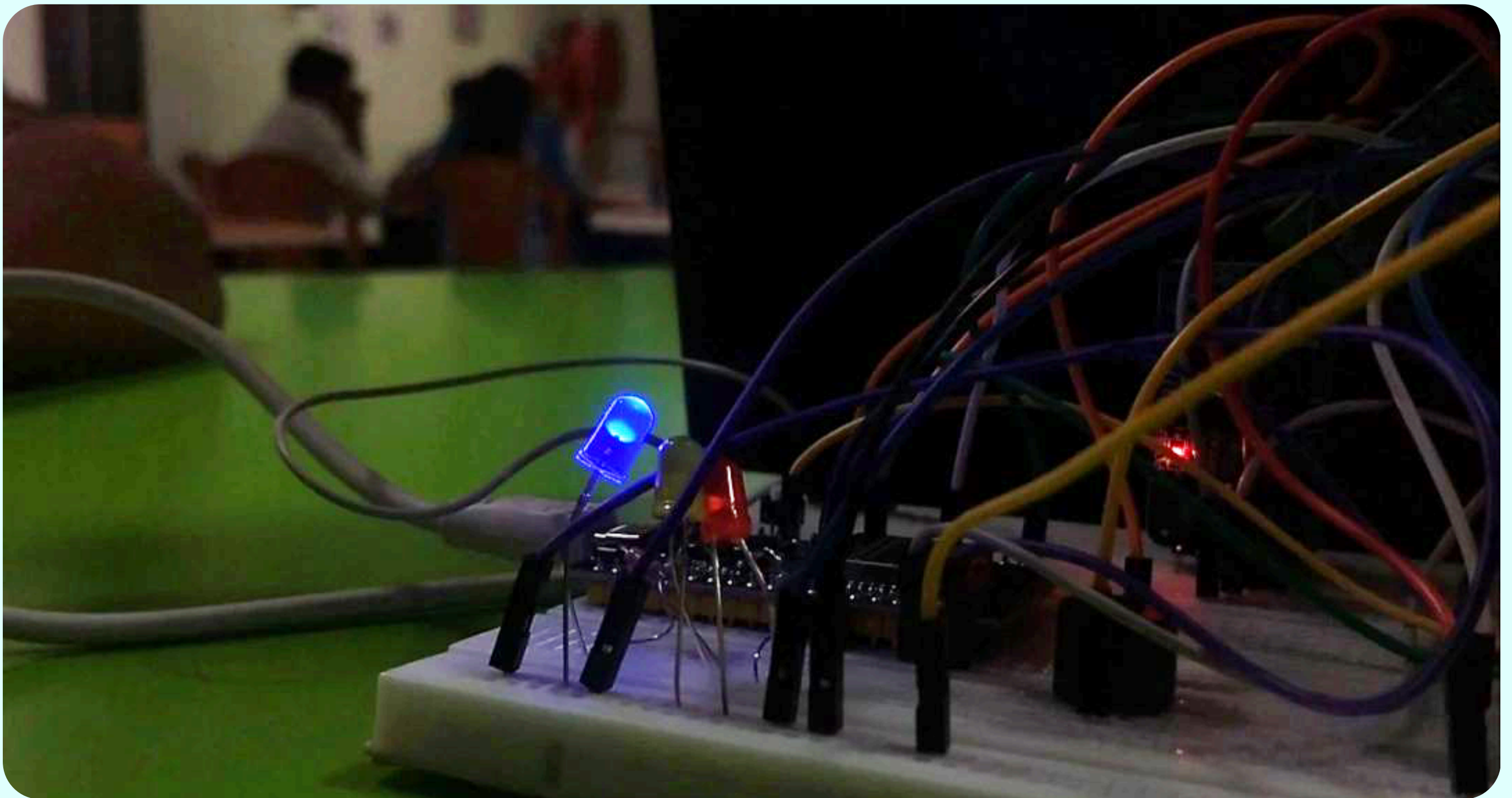
J Renees Jenisha along with M Rathnaa Kumari from Final Year presented a paper titled “Satellite Image Processing using Deep Neural Networks” at the International Conference on Emerging and Transformative Technologies in Computer Science (ICETT-CS 2026), conducted by J.P. College of Engineering, on 11-03-2026.



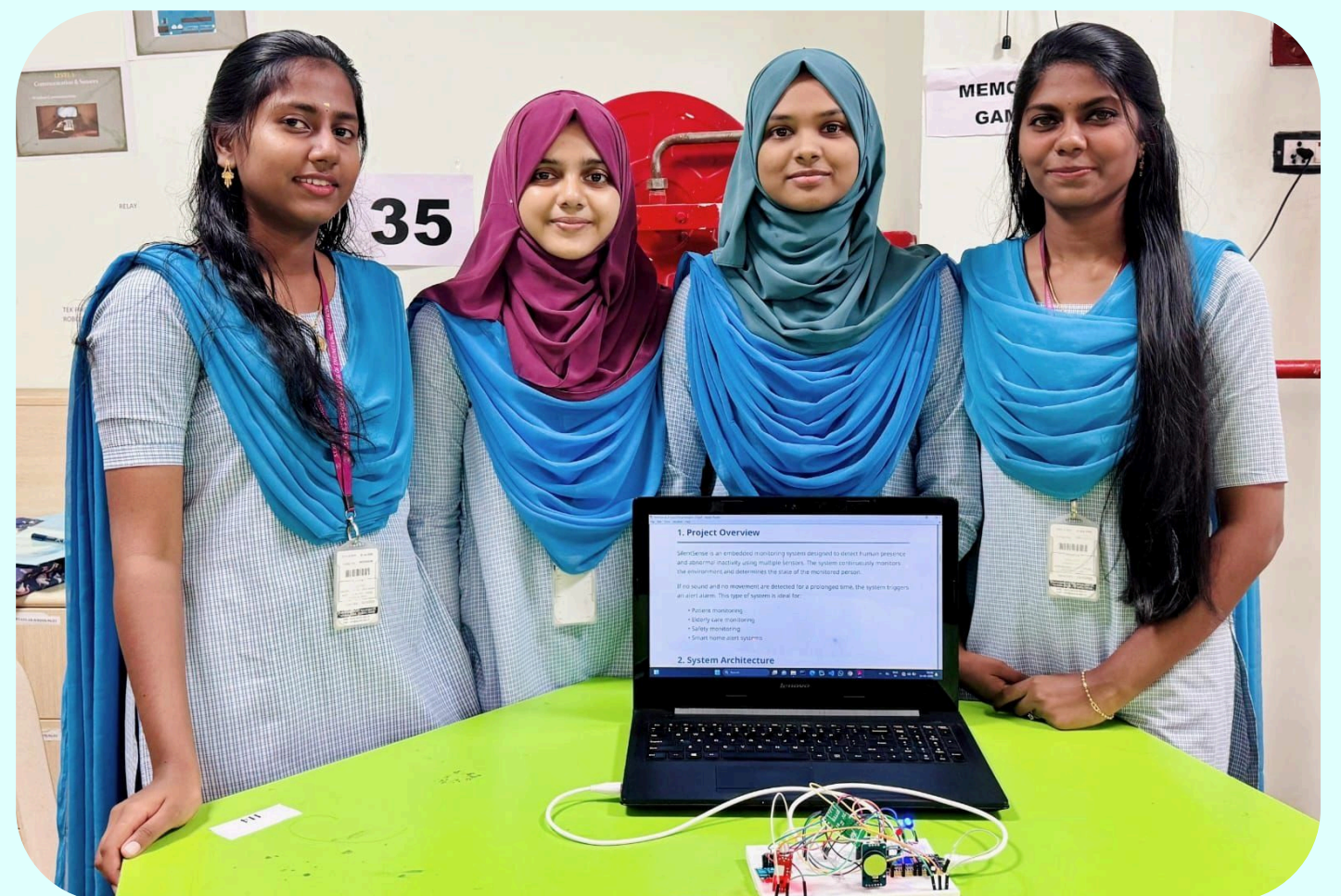
Subiksha A S, Abirami S C and Athirsha A S from Final Year secured 2nd prize in the “Paper Presentation Competition” conducted at CSI Institute of Technology, Thovalai on 18th March 2026.



Project Expo



Akshitha K, Nassiya Fathima N, Nowfi Fathima A, Mithuna F S from III Year has presented a hardware project “Silent Sense” at the IEEE Project Expo – 2K26 organized by the IEEE Student Branch at St. Xavier’s Catholic College of Engineering.



Renees Jenisha J and Rathnaa Kumari M from Final Year secured 1st prize with cash award in IEEE Project Expo 2k26, on the title “Satellite Image Segmentation and Processing using Deep Learning Model”, held on 14th March 2026 at St.Xavier’s Catholic College of Engineering.



International Workshop Exposure

“AI and HPC Solutions for Climate Resilience & Coastal Sustainability” held at IIIT Kottayam



Abilash Antony A, Abishek S V, Jerish Moni M, Nesakumaran G, Sree Shai Ram A, Starwin Binesh S S and Thabith Atlas X (III Year) participated in the International Level Workshop on “AI and HPC Solutions for Climate Resilience & Coastal Sustainability” held at IIIT Kottayam, Kerala, on 24-03-2026 and 25-03-2026.



Our Winners at National Symposium / Competitive Exam



Anifer Marshal M (II Year) participated in the Debugging competition at the National Level Technical Symposium (VOYCE '26) held at Mar Ephraem College of Engineering & Technology on 27-03-2026 and secured the Second Prize, receiving a certificate and trophy for his achievement.

Pon Dharshiga P (III Year) took part in the Debugging competition at the National Level Technical Symposium (ROARTECHZ '26) conducted by Ponjesly College of Engineering on 27-03-2026 and won the Second Prize, earning a certificate and trophy.



Ancelin Merbina M and Mithuna F S from III Year secured 2nd prize of Rs.2000 cash award for “Cook Without Fire” competition in National Level Techno Management Fest-GWANI'26 conducted by Mar Ephraem College of Engineering and Technology, Marthandam, on 18 March 2026.



MIDHUN J (2020-2024) alumnus got score in GATE2026.



Best Female Student Award 2025-2026



Reneesh Jenisha J from Final Year received “Best Student Award of 2026” for the outgoing performance and contribution in curricular, co-curricular, and extra-curricular activities from Women’s Cell, St.Xavier’s Catholic College of Engineering on 6th March 2026.

Faculty Excellence & Achievements

Article Presented:

- Dr. Suja A. Alex presented a paper titled “Modeling Fracture Behavior and Fatigue Crack Propagation in FSWeld AA2024-T351 Alloy Using Feedforward Neural Network” has been accepted for oral presentation on 10-03-2026 at the International Conference on Advances in Aerospace and Energy Systems 2026 (IAES-2026) will be held from 16–18 April 2026 at ISRO Propulsion Complex (IPRC), Mahendragiri.
- Dr. G.Geo Jenefer M.E., Ph.D., has presented a paper titled "SMARTGOV: GOVT CAREER DEVELOPMENTWEBSITE FOR STUDENTS" at the 14th International Conference on Contemporary Engineering and Technology ICCET 2026 held during 22nd & 23rd March 2026 at Prince Shri Venkateswara Padmavathy Engineering College, Chennai, India.
- Dr. G.Geo Jenefer M.E., Ph.D., has presente a paper titled "QUICK PASS" at the 14th International Conference on Contemporary Engineering and Technology ICCET 2026 held during 22nd & 23rd March 2026 at Prince Shri Venkateswara Padmavathy Engineering College, Chennai, India.
- Er. P. Agnes Alex Rathy presented a paper titled ‘A Hybrid GNN-LSTM Deep Learning Framework for Vaccine Hesitancy Prediction’ at the 14th International Conference on Contemporary Engineering and Technology (ICCET 2026).
- Er. P. Agnes Alex Rathy presented a paper titled ‘EcoVese: A Web-Based Interactive Platform for Real-Time Carbon Footprint Tracking and Personalized Sustainability Recommendation’ in 10th Engineering Technology and Science (ICETS’ 26) organized by Muthayammal College of Engineering, Rasipuram, Namakkal District, Tamil Nadu.
- Er. A. Arul Rex presented a paper titled “Hybrid Machine Learning and Optimal Assignment Model for Skill- Based Migrant Workforce Matching” in the International Conference on Emerging and Transformative Technologies in Computer Science (ICET²-CS 2026).

Reviewer Recognition:

- Dr. Suja A. Alex reviewed a manuscript for PeerJ Computer Science journal on 08-03-2026.
- Dr. Suja A. Alex reviewed a manuscript for Applied Soft Computing journal, Elsevier on 10-03-2026.
- Dr. Suja A. Alex reviewed a manuscript for Measurement journal, Elsevier on 10-03-2026.
- Dr. Suja A. Alex reviewed a manuscript for IEEE Sensors Letters, IEEE on 15-03-2026.
- Dr. Suja A. Alex reviewed a manuscript for IEEE Sensors Journal, IEEE on 22-03-2026.

Article Published:

- Dr. J. Annrose , Asmitha C, Fathima Irfana S, Fathima Safrin M, Safa Gulam, “Expire Eye: A Smart AI-Based System for Automated Medicine Expiry Detection Using YOLOv8 and EasyOCR” presented in a Scopus-indexed International Conference on Advanced Computing Systems and Intelligent Communication Engineering held during 27 - 28 March 2026 hosted by Sambhram Institute of Technology (SaIT).
- Dr. J. Annrose presented a paper titled Weapon Detection using YOLOV8 in an international conference on ICETEME PET Engineering College held on 27th March 2026.
- Er. A. Arul Rex, R. Jemila Rose, and A. Alphiya, “Oppositional remora based AUV path planning with optimal energy efficient data collection in underwater wireless sensor network,” International Journal of System of Systems Engineering, Inderscience Publishers, pp. 82–97, Mar. 2026, doi: 10.1504/IJSSE.2026.152424. (Scopus).

Session Chairs for the Conference:

- Dr. Suja A. Alex acted as Session Chair for the track IoT and Edge Computing at the 2nd International Conference on Cognitive Computing and Data Analytics (ICCCDA 2026), SXCCE held from 12th to 14th March 2026.
- Er.Arul Rex A. acted as Session Chair for the track Data Analytics at the 2nd International Conference on Cognitive Computing and Data Analytics (ICCCDA 2026), SXCCE held from 12th to 14th March 2026.

Seminar:

- Dr. G.Geo Jenefer M.E., Ph.D., has conducted a seminar on "SMART AI LEARNING WITH RAG AN NOTEBOOK LLM" on 20th March 2026.

Online Course:

- Dr. J. Annrose has completed a course on “Introduction to DevOps Tools” by Simplilearn.
- Er. P. Agnes Alex Rathy has completed a course on “YUVA AI For All” course offered by TCS iON in collaboration with IndiaAI.

Placement Highlights – March 2026

The Department of Information Technology proudly presents the placement achievements for January 2026.

We Congratulate

The following B.Tech IT students got job offer at
Goan Institute International



Jerrica R S



Rathnaa kumari M



Siva Priya S S



Mary Shanika S



Madhumitha A S

Placement Highlights – March 2026

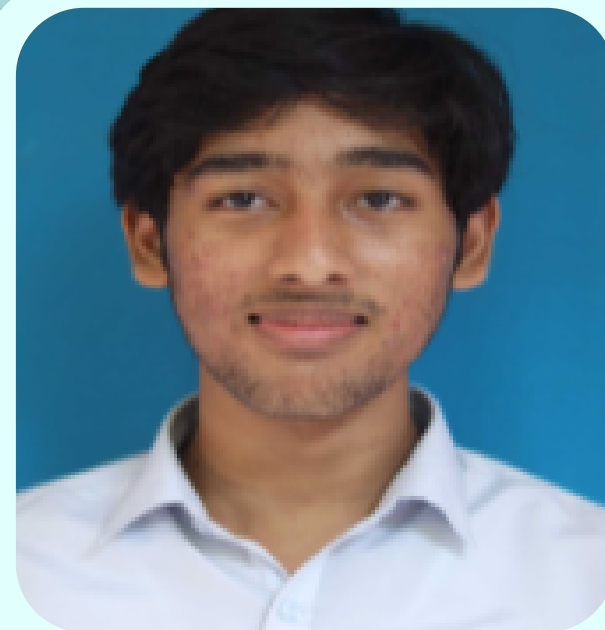
The Department of Information Technology proudly presents the placement achievements for January 2026.

We Congratulate

The following B.Tech IT students got job offer at **Digital Logiciels Private Limited.**



Pachaiyappan S



Jebin John J



Renees Jenisha J



Susi Melinda I

International Women's Day 2026



The Department of Information Technology at St. Xavier's Catholic College of Engineering, through the Women's Wing of BRIGITZ, celebrated International Women's Day 2026 with great enthusiasm and purpose. The celebration was centered around the theme "Rights. Justice. Action. For ALL Women and Girls", aiming to empower students to lead, innovate, and inspire.

As part of the celebration, a women's empowerment talk was organized on 06 March 2026, where Dr. Suja A. Alex, Dr. Annrose J, Dr. G. Geo Jenefer, Er. Agnes Alex Rathy P, and Er. P. Innasi Lineta addressed the students. The session, based on the theme "Give to Gain", emphasized the importance of self-confidence, leadership, mutual support, and continuous learning in achieving personal and professional growth. The speakers shared valuable insights and experiences, motivating students to overcome challenges and strive for excellence.

To further mark the occasion, a series of competitions was conducted on 09 March 2026, encouraging active student participation and engagement. The featured events included a Poster Design Competition, "Women in Tech – Innovation Pitch", and "Be the Leader" – Tech Leadership Role Play Challenge. Students from II, III, and IV year participated enthusiastically, demonstrating their creativity, innovative thinking, and leadership abilities.

The competitions provided a dynamic platform for students to express their ideas on women's empowerment and technological advancements, while also enhancing their communication and problem-solving skills. Overall, the celebration served as a meaningful initiative in promoting gender equality, fostering confidence, and nurturing future women leaders in the field of technology.



World Water Day 2026

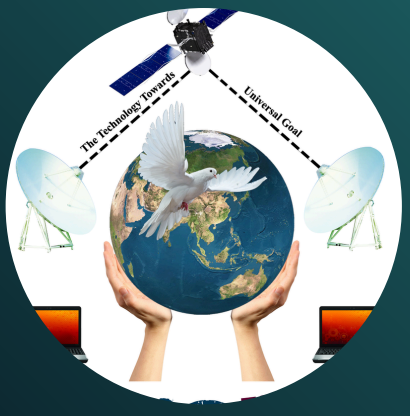


The Department of Information Technology at St. Xavier's Catholic College of Engineering commemorated World Water Day 2026 on 23rd March 2026, aligning with the theme "Water and Gender" and the United Nations Sustainable Development Goals, particularly SDG 6 Clean Water and Sanitation. The event aimed to raise awareness about the importance of water conservation, equitable access, and sustainable water management practices.

Dr. Suja A. Alex, Head of the Department, addressed the students, emphasizing that water is a vital resource and its conservation is a collective responsibility. As part of the celebration, a "Young Minds Talk" session was organized, where students actively participated as speakers, sharing their perspectives on environmental sustainability and water conservation.

The session featured insightful talks covering various dimensions of water management. Ms. Jeevima V.M highlighted the importance of efficient water usage, conservation techniques, and sustainable practices to ensure long-term availability of water resources. Mr. Tony Mathew R discussed global and local water challenges, emphasizing the role of policies, governance, and innovative solutions in addressing water scarcity. Ms. Shyma S.M and Ms. Abirami S.C elaborated on the concept of water reuse and recycling through circular systems, focusing on wastewater management and minimizing wastage. Ms. Absara C.S presented practical and simple measures that individuals can adopt in their daily lives to conserve water and contribute to environmental sustainability.

The event served as a meaningful platform to enhance awareness and inspire students to adopt responsible practices toward water conservation. It successfully fostered a sense of environmental responsibility and encouraged active participation in sustainable development initiatives. The program was convened by Dr. Suja A. Alex and coordinated by Dr. G. Geo Jenefer J and Dr. M. Antony Joans Kumar.



BRIGITZ Members

Office Bearers:



TONY MATHEW R
Final Yr. IT
SECRETARY



SHENO MUJUS J
Final Yr. IT
TREASURER



ALTRIN BENSER A
III Yr. IT
JOINT SECRETARY



ABSARA C S
III Yr. IT
JOINT TREASURER

Executive Members:



FEJOE J S
Final Yr. IT



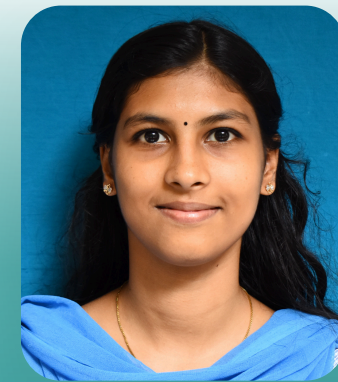
SANJAI R
Final Yr. IT



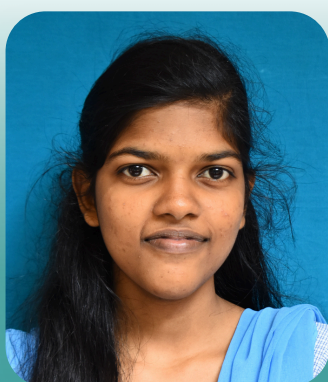
STEFFLIN S S
Final Yr. IT



SUSI MELINDA I
Final Yr. IT



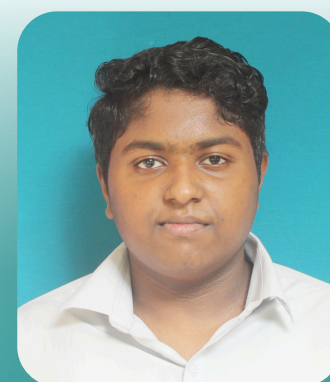
JENITHA J R
III Yr. IT



MAGDALENE A
III Yr. IT



SARA R A
III Yr. IT



PK HARIS ASWATH
II Yr. IT



JEEVIMA V M
II Yr. IT



Dr. G. GEO JENEFER
FACULTY ADVISOR



DR. SUJA A. ALEX,
HoD/IT.

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Department of Information Technology

Vision:

Creating top-notch Information Technology Engineers, innovative researchers and successful entrepreneurs towards developing a technically-empowered humane society.

Mission:

- M1. Providing quality technical education and high caliber skill training that meets the needs of society and latest technical expectations of the industry.
- M2. Fostering innovative and rigorous research culture among staff and students to find optimal solutions for complex problems.
- M3. Imparting value-based education to imbibe ethical principles and act with social responsibility, team spirit, and leadership.
- M4. Promoting and developing entrepreneurial skills of the students and handhold them towards commercial success.