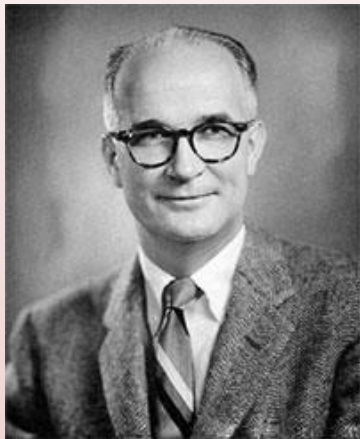


Newsletter

FEBRUARY
2026

"Great discoveries are often the result of persistent effort and curiosity."



"The key to progress is asking the right questions and pursuing them relentlessly."

William
Bradford
Shockley Jr



ARKA Educational & Cultural Trust (Regd.)

Jain Institute of Technology, Davangere

(A Unit of Jain Group of Institutions, Bangalore)



*Department of Electronics and
Communication Engineering*



Electro Infinity

Create, Enhance and Sustain



About the Department



Dr. Santosh Herur
Professor & Head
Dept. of E&CE
JIT, Davangere

Department of Electronics and Communication was started in the year 2011-12. The department emphasizes on imparting advanced technical knowledge in various fields like signal processing, VLSI Technology, Embedded system, wireless technology, microwave engineering, optical communication, and microelectronics and control systems. Highly qualified, experienced and dedicated staff members are the backbone of the department. Well equipped, sophisticated, precision and state of the art laboratories are centre of attraction in the campus. Another major strength of the department is its extensive collection of technical books, periodical and journals, ENCORE association of the department of E & CE aims at targeting innovations in the field of advanced communication and networking.

The Department has MOU with Karunadu Technologies Pvt. Ltd, Bengaluru, Abiyantrix, Soft Solutions, Davangere, Sai Tech, Mysore and PSN Hub IT consultancy services. The MOU organizations provide Internship training and conduct workshops on recent trends and organize seminars for the students to enhance their industrial exposure.

Editor's desk



Ms NAYANA T

*Assistant Professor
Dept. of E&CE,
JIT, Davanagere*

*Warm greetings to the readers of **Electro Infinity**!!*

We are pleased to share with you the February issue of the newsletter for the year 2026 with a Heartfelt wish of Mahashivaratri festival. We express our considerable gratitude and appreciation to everyone who have contributed to this Newsletter magazine. These contributions have required a generous amount of time and effort. It is this willingness to share knowledge, concerns and special insights with fellow beings that has made this magazine possible.

Finally we would like to conclude with these words "Research is a process of frustration punctuated by moments of discovery"- William Bradford Shockley Jr.

Happy reading

Thank you

NAYANA T

Vision of the Department

Endeavours to achieve academic excellence by providing value based education to the students of Electronics and communication engineering and enable them to meet the ever changing needs of the society.

Mission of the Department

- ❖ *To emphasize on student focus learning environment.*
- ❖ *To prepare graduates who surpass in the engineering career, qualified to acquire technical knowledge and ethical values.*
- ❖ *To provide a platform to inculcate team spirit and leadership qualities to succeed in professional career.*

Program Specific Outcomes (PSOs)

- ❖ *PSO1: Analyze, simulate and design electronic and communication circuits for given specifications.*
- ❖ *PSO2: Design and test processor based systems*

Program Educational Objectives (PEOs)

- ❖ *PEO1: To create graduates with a strong base in Electronics & Communication Engineering.*
- ❖ *PEO2: To produce technically competent graduates with the ability to understand, analyse & develop electronic systems.*
- ❖ *PEO3: Ability to work with professional ethics and as a team member to realize the goals of the projects.*
- ❖ *PEO4: Excellence in professional career by attaining higher education.*

Artificial Intelligence (AI) Awareness Program

Speaker:
Dr. Suresh Kumar
Professor & Head
Department of Electronics & Communication Engineering
Dr. J. G. Institute of Technology
Davanagere, Karnataka

Davanagere, Karnataka, India
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Lat 14.431355° Long 75.957321°
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The session was delivered by **Dr. Santosh Herur**, Professor and Head, Department of Electronics and Communication Engineering, who shared valuable insights drawn from real-world applications of AI technologies. The program was attended by 6th semester students of Electrical and Electronics Engineering and Electronics and Communication Engineering. The session aimed to bridge the gap between academic knowledge and emerging industry trends, particularly in the rapidly evolving field of Artificial Intelligence.

Student's Achievement : 7th Semester Results



Soumya M M
(4JD22EC053)
86.71%



Madhumathi K N
(4JD22EC029)
85.71%



Shreya Narasagond
(4JD22EC048)
85.42%

VTU 7th Semester CBCS Results for December 2025- January 2026 Examinations have been released for all regions on 6th February 2026. Department of Electronics & Communication Engineering has achieved a passing percentage of **77.61%** in the 7th semester results. **Soumya M M** has secured 1st place with 86.71%, **Madhumathi K N** has secured 2nd place with 85.71% and **Shreya Narasagond** has secured 3rd place with 85.42%. Hearty Congratulations to all the toppers of E & C E Department on behalf of College Management, Principal, HOD, Teaching and Non-teaching staff members.

Faculty Achievement : Paper Publication



Enhanced security for static random access memory with armadillo Catboost

K.I. RaviKumar^{a,*}, K. Anusha^a, C. Kalal Vijayalaxmi^b, T. Kshitija^a,
M. Ayesha Siddiqa Khanum^a

^a Electronics and Communication Engineering, Jain Institute of Technology, Davanagere, India

^b Electronics and Communication Engineering, KLS Vishwanathrao Deshpande Institute of Technology, Haliyal, India

ARTICLE INFO

Keywords:

Static random access memory
Armadillo
CatBoost
Security
Confidential
Communication

ABSTRACT

Very Large Scale Integration (VLSI) design has become a critical aspect of high-speed chip communications due to its simple, efficient register and data access, but these systems can be vulnerable to security attacks, leading to excessive traffic and slow performance. Therefore, the SRAM control unit uses a novel Armadillo Catboost Security Control (ACSC) design. First, an SRAM block was built with the controller's associated facilities. Then, the ACSC design was created using the Armadillo fitness traits, with the addition of CatBoost machine learning capabilities to mitigate threats. When many users are communicating within a large dataset, the ACSC protects the system from vulnerabilities. Key performance indicators are assessed and compared with existing systems, including processing time, secrecy score, memory usage, traffic rate, power consumption, delay, and bit error rate (BER). The developed model is validated using several metrics, and it achieves a power consumption of 2.98 mW, a memory usage of 7446.96 MB, a BER of 0.00276 %, a delay of 1.97 ns, a confidentiality score of 95 %, and a processing time of 59.21s. This model has superior performance, security, and operational performance compared to existing systems.

Dr. Ravikumar K. I., Associate Professor, along with Prof. Anusha K., Prof. Ayesha Siddiqa Khanum, and Prof. Kshitija T., Assistant Professors from the Department of Electronics and Communication Engineering (E&CE), have successfully published a research paper titled **“Enhanced Security for Static Random-Access Memory with Armadillo Catboost”** in an ELSEVIER journal. This achievement highlights the faculty members’ strong commitment to research, innovation, and academic excellence, bringing recognition and pride to the department and the institution. The College Management, Principal, Head of the Department, and all staff members of the E&CE Department extend their heartfelt congratulations to the authors and wish them continued success in their future research endeavors.

Student's Achievement : Placement



JGI Jain Institute of Technology, Davangere
(Affiliated to VTU, Belagavi)

JIT Placement
Congratulations

Branch : E&CE
Batch : 2025-26

Soumya M
For Getting Selected in

CTC: 4 LPA

Best Wishes From Management, Principal, Advisor, Dean(T&P), HOD,
Placement Coordinators, Teaching & Non-Teaching Staffs and
Students.

9663868258 www.jitd.ac.in placement@jitd.in

Dyashin
Innovate • Collaborate • Accelerate

The Training and Placement Cell, JITD, organized a placement drive for Dyashin Technology. From the E&CE department, Soumya M. has been placed at Dyashin Technology. Hearty congratulations to this student from the College Management, Advisor, Principal, HOD, Placement Coordinators, and all the faculty members.

A Training Session on Technology Commercialization, Licensing, Transfer Practices & Strategy

ARKA Educational & Cultural Trust (R)
JGI JAIN INSTITUTE OF TECHNOLOGY, DAVANGERE
(A unit of Jain Group of Institutions, Bangalore, Affiliated to VTU, Belagavi)

NAAC GRADE A+

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

In Association with
Research & Development cell and Institution's Innovation Council cell
Organizes
Training on Technology, Commercialization, Licensing and Transfer Practices & Strategy

Resource Persons

Dr. Cyril Prasanna Raj P
Director, Research & Professor,
Dept. of E&CE, CIT, Bangalore
Topic: Technology Evolution & Strategies for Commercialization

M.S. Jayachandra Aradhya
CEO
Silicon Microsystems, Bangalore
Topic: Innovation and It's Impact

Dr. Ganesh D B
Principal & Director

Dr. S Manjappa
Advisor

Dr. K B Prakash
Dean Academics

Dr. Santosh Herur
Prof. & Head
Dept. of E&CE
IIC Vice President

Dr. Ravi Rayappa
Dean R&D

Prof. Harish K S
IIC Convener

Prof. Anusha T S
Prof. Mounashree B
IIC Coordinators

Prof. Santosh Kumar G S
R & D Coordinator

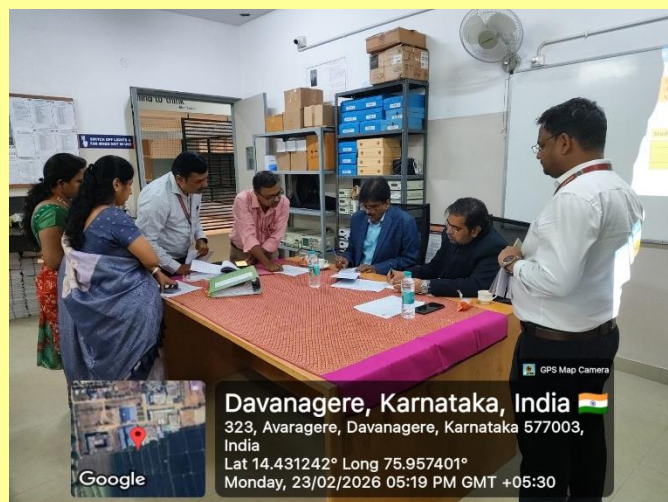
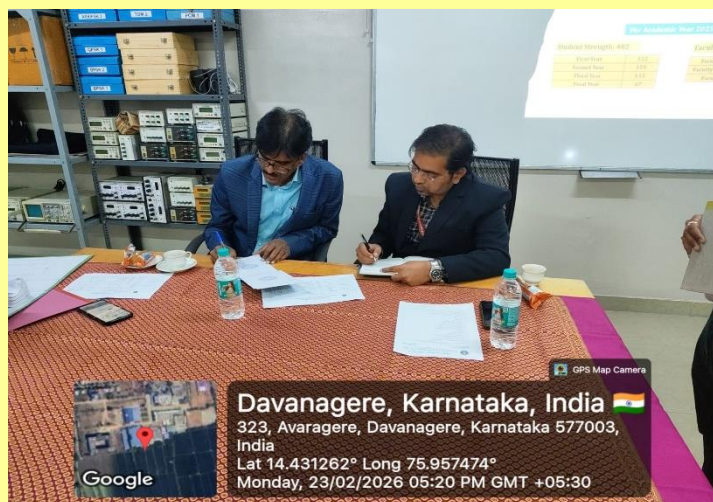
Venue: JIT, Auditorium
Date: 19/02/2026 Time: 10:30am Onwards



The Department of Electronics and Communication Engineering, in association with the Research & Development Cell and the Institution's Innovation Council (IIC), organized a **"Training on Technology Commercialization, Licensing, Transfer Practices & Strategy"** on 19th February 2026 at the JITD Auditorium. **Dr. Cyril Prasanna Raj P**, Director (Research) and Professor, Department of E&CE, Cambridge Institute of Technology, Bangalore, and **Mr. M. S. Jayachandra Aradhya**, CEO, Silicon Microsystems, Bangalore, were invited as the resource persons for the program. **Dr. Ganesh D. B.**, Principal, **Dr. Manjappa Sarathi**, Advisor, **Dr. Santosh Herur**, Professor & Head, Department of E&CE, and **Dr. Ravi Rayappa**, Dean (R&D), JITD, conveyed their best wishes for the successful conduct of the program. **Dr. Cyril Prasanna Raj P** delivered an insightful session on the evolution of technology from research concepts to market-ready innovations. He explained how emerging technologies move through various stages such as ideation, prototyping, validation, and commercialization. **Mr. M. S. Jayachandra Aradhya** presented a thought-provoking session on innovation and its transformative impact on society and industry. He discussed how innovation drives economic growth, competitiveness, and technological advancement. **Prof. Harish K. S.**, Convener; **Prof. Anusha T. S.**, **Prof. Mounashree**

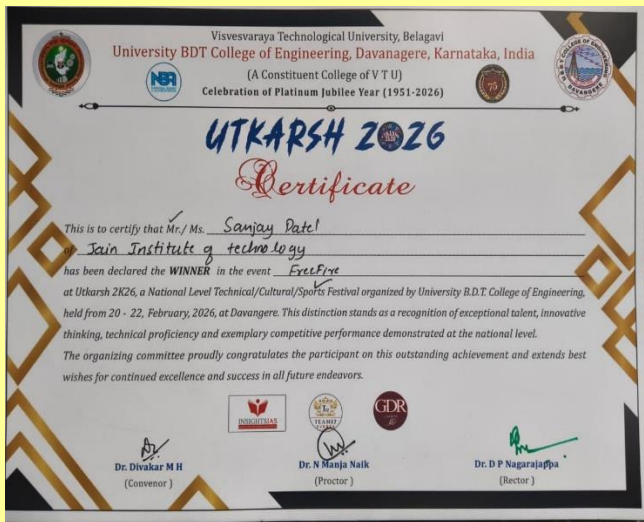
B., IIC Coordinator, and **Prof. Santosh Kumar G. S.**, R&D Coordinator, Department of E&CE, were also present during the program. A total of 250 students from the 6th semester of various departments attended the program. All teaching and non-teaching staff members of the Institute were also present during the workshop.

LIC Visit



The LIC committee visited the Department of Electronics and Communication Engineering (E&CE) on 23rd February 2026. **Dr. T. G. Manjunath**, Professor from **Sai Vidya Institute of Technology**, was the expert team member and he verified academic and student activity files. During the visit, he verified the Research and Development (R&D) files, NPTEL and MOOC course documentation, students' project reports. The visit concluded successfully with valuable suggestions for further strengthening the department's academic and research initiatives.

Student's Achievement



Srinidhi J. B. and Sanjay Patel G. S., students of the 6th Semester 'B' Section, Department of Electronics and Communication Engineering, participated in the Inter-Collegiate Fest "**UTKARSH 2026**" held at University B.D.T. College of Engineering, Davanagere, from 20th to 22nd February 2026, and secured **first place** in the **Free Fire** event. Hearty congratulations to these students on behalf of the College Management, Principal, Head of the Department, and the Teaching and Non-Teaching Staff members.