Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

(An Autonomous Institute, Affiliated to Visvesvaraya Technological University, Belagavi, Accredited by NAAC, with 'A+' Grade) Near Jnana Bharathi Campus, Mallathahalli, Bengaluru – 560056

Department of Electronics and Communication Engineering

Project Exhibition Report

"TechExplore: Explore Technology Beyond Limits"

Submitted to
Department of Electronics and Communication Engineering
Dr. Ambedkar Institute of Technology, Bengaluru

Organized by
Department of Electronics and Communication Engineering

Faculty Co-ordinators

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Under the Guidance of
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Bengaluru – 560056

TechExplore: Explore Technology Beyond Limits

Date of Event: 23rd Tuesday 2025

Venue: ECE Seminar Hall, Dr. Ambedkar Institute of Technology, Bengaluru

Organized by: Department of Electronics and Communication Engineering, Dr. AIT

1. Event Overview

The Department of Electronics and Communication Engineering at Dr. Ambedkar Institute of Technology organized a comprehensive **Technical Project Exhibition** showcasing the innovative prowess of 7th-semester students. The event served as a platform for budding engineers to demonstrate their technical solutions to real-world problems across diverse domains of electronics and computing.

2. Exhibition Themes

The projects were categorized into six cutting-edge thematic areas, reflecting current industrial trends and research frontiers:

1. AI, Data Science, and Blockchain
2. VLSI / Cyber and Network Security
3. Smart Technology and 5G/6G Communication
4. Drone, Robotics, and Related Technology
5. IoT, Sensors, and their applications
6. Signal and Image Processing

3. Dignitaries and Guests of Honor

The event was graced by a distinguished panel of experts from both industry and academia:

- **Chief Guest: Mr. Chirag S Rao**, Co-founder, Director & CTO, Sudarshana Semiconductors Pvt. Ltd.
- **Dr. G.V. Jayaramaiah**, Professor, EEE Dept, Dr. AIT
- **Dr. Manjunath Rao**, Dean (IQAC), Dr. AIT
- **Dr. B. Sivakumar**, Professor, ETE, Dr. AIT
- **Dr. T.N. Raju**, Dean (Exams), Dr. AIT
- **Dr. Nandini S**, HOP, CSE Dept, Dr. AIT
- **Dr. J.S. Baligar**, HOS, App. Science & Humanities, Dr. AIT

Faculty Coordinators:

- **Dr. Meenakshi L Rathod**, Associate Professor, Dept. of ECE.
- **Prof. Vidyashree N.**, Assistant Professor, Dept. of ECE.

4. Proceedings of the Day

Inaugural Session (9:30 AM – 10:30 AM)

The day commenced with the registration of participants and the arrival of guests. The formal inauguration included:

- **Welcome Address:** Delivered by the Head of Department (HoP), highlighting the importance of experiential learning.
- **Inaugural Rituals:** The traditional lighting of the lamp ceremony.

- **Keynote Speech:** Mr. Chirag S Rao shared insights into the semiconductor industry and encouraged students to bridge the gap between academic projects and commercial viability.

Technical Sessions & Evaluation (10:45 AM – 1:00 PM)

Following a brief networking tea break, **Session 1** of the Project Presentation began.

- **Peer Learning:** A significant highlight was the attendance of junior students, who visited the stalls to learn from their seniors' experiences.
- **Jury Review:** The internal and external jury members visited each booth, evaluating projects based on innovation, design methodology, and presentation.

Afternoon Session (2:00 PM – 3:00 PM)

The Guest of Honor, Mr. Chirag S Rao, personally visited all thematic sections. He provided constructive feedback and technical advice to the 7th-semester teams, emphasizing the scalability of their designs.

5. Valedictory and Awards (3:00 PM – 4:00 PM)

The exhibition concluded with a formal Valedictory Function.

- **Closing Remarks:** A summary of the day's achievements and the high quality of the displayed work.
- **Award Ceremony:** Recognition was given to two outstanding teams from each of the six themes (1st and 2nd Prize).
- **Vote of Thanks:** Expressed gratitude to the faculty coordinators, guests, and the **Nanogram** student club for their seamless execution.

6. Result Summary

The following table summarizes the awardees across the themes:

Theme	Rank	Student Name(S)	Project Title
Theme 1	1st	Anand S Meti Kushal Gowda T Megharaj K N Shivamani	Smart Green House Automation Using ML
	2nd	Kalyankumar Biradar Karthik	AI Based Real-Time Traffic Management System
Theme 2	1st	Aditya Chaithrashree B.S	FPGA Based Vending Machine for Logical Gates
	2nd	Ankit Kumar Singh Satya Venkata Kaushik Nath Gurrala Shivaprasad S Shetty Surya Teja N	Design And Development of a Multi-Channel RF Transceiver System for Precision Servo and ESC Control
Theme 3	1st	Prathik K Punith Gowda B R Devaraja A	Wireless Energy Transfer & Obstacle Based Steering Lock System
	2nd	Anushree C N Hema R G Niharika S	Automated Pet Welfare Assistance System
Theme 4	1st	Parvathi Pavithra N G Preethy Y Priyanka R	Smart, Assistive Device for Enhancing Hand Movements in Individuals with Physical Disabilities by Using EEG Signals.
	2nd	Namith Gowda CS Nivedita Harish Shetty Shree Priya V Varun K	Levitate To Accelerate: A New Era of High-Speed Transportation
Theme 5	1st	Chandu D.S Chethan Kumar D Jayanth Gowda K Kushal Gowda CK	Real-Time IOT-Enabled Cloud System for Vehicle Monitoring and Maintenance Forecasting
	2nd	Tejas C Aishwarya B Sania M Nandithashetty R	Virtual Health Monitoring System
Theme 6	1st	Ajjola Manjunatha Bhavana S Keerthana K Lekha P	Smart Energy Monitoring System Using Esp-Now Technology
	2nd	Nithya M Gowda Puneeth N K Shailaja K M Skandakumar M G	AI Vision AID YOLO Obstacle Detection and Classification