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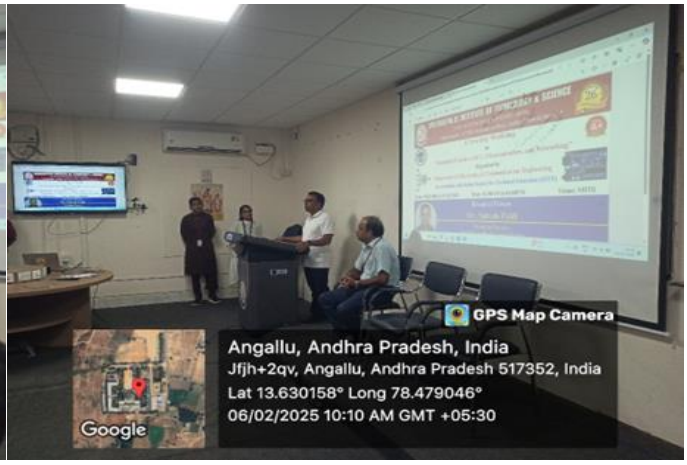
A Report on
Two-day workshop on
"Embedded Systems with C, Microcontrollers, and Networking"
Organized by Department of Electronics & Communication Engineering
In association with MITS ISTE
Date: Feb 6 & 7, 2025



Report Submitted by: Mr. Kashiraj V Kalshetti, Assistant Professor, Department of ECE; Mr. B. Subbarayadu, Assistant Professor, Department of ECE.
Resource Person Details: Mr. Suresh Paidi, Managing Director, RADAR technical Center Pvt Ltd, Bengaluru, Karnataka.
Venue: Scale-up Room.
Attendance: 70 Participants.
Mode of Conduct: Offline.
Report Received on 08.02.2025.

Program Overview:
The program commenced at 10:00 AM with a welcome address by Vice principal Dr. Ramanathan and Dr. S. Rajasekaran, Head of the Department of ECE, who introduced the resource person, Mr. Suresh Paidi, currently working as a Managing Director, RADAR technical Center Pvt Ltd, Bengaluru Karnataka. Mr. Suresh P began the session by expressing his gratitude to the participants, organizing committee, Head of the Department, Principal, and Management of MITS for the opportunity to share his insights and research on Embedded System.

Key Points Discussed:

1. **Microcontroller**
    1. Overview Microcontroller LPC 2148
    2. Introduction to Embedded C Software.
2. **Key Features of ARM processor**
    1. Architecture of ARM Processor.
    2. ARM processor features, Application in Real time system.
3. **Key aspects of Networking Protocol:**
    1. RS232, RS422, RS485, CAN, I2C protocols.
    2. Application of networking protocol.
    3. Working of networking protocol.
4. **Interfacing of Microcontroller:**
    1. LED blinking, L293D Motor Driver
    2. Collaboration opportunities between academia and industry.

Challenges Embedded Deployment:

Career Opportunities in Embedded Systems and VLSI:

1. Research and development roles in VLSI and Embedded companies.
2. Opportunities Embedded processor integration with communication networks.
3. Global career paths in technology-driven sectors.

Q&A Session: Addressing queries from students on research opportunities, career paths, and embedded technology's future impact.

Conclusion:

The session provided an in-depth understanding of the embedded technologies with a focus on Microcontroller and Processor. Mr. Suresh Paidi presentation offered a comprehensive overview of the embedded technology, its potential applications, and the challenges ahead. His experiences as a research scientist in the field helped bridge the gap between theoretical knowledge and practical implementation.

Program Outcomes:

- Increase awareness among students about emerging technologies and their applications.
- Encourage students to explore research in embedded system and related fields.
- Strengthen academic-industry collaboration for innovative research projects in embedded technology.