ST. FRANCIS COLLEGE FOR WOMEN, HYDERABAD
ACADEMIC YEAR 2025 - 2026
DEPARTMENT OF COMPUTER SCIENCE

Report on the Inter College Robotics Workshop Conducted on 6th & 7th March,2026.

Time: 9:00 a.m-3:00 p.m.

Brochure:

The Department of Computer Science, organized C@nnect 8.14 – A Two-Day Inter-College Robotics Workshop on 6th and 7th March 2026, bringing together selected students from various colleges across the twin cities for an immersive hands-on learning experience in robotics. The resource person for the workshop was Mr. Ravi Teja.

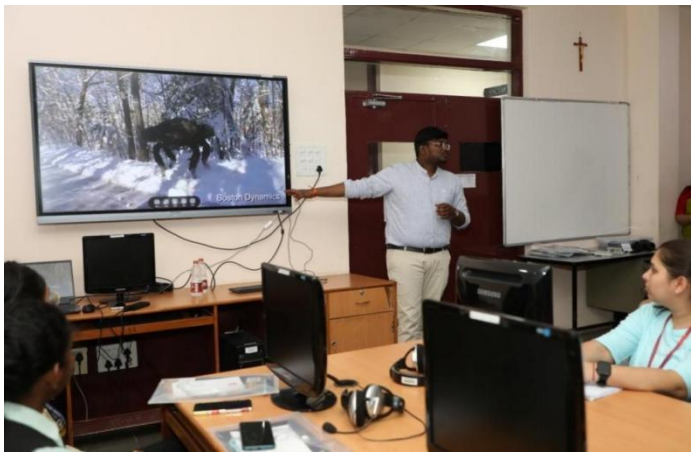
Objectives:

- To provide hands-on experience in basic robotics.
- To understand motor control using L298N and PWM.
- To implement IR line follower and obstacle avoidance robots.
- To introduce autonomous navigation using sensors.

Outcomes of the Event:

- Students gained practical exposure to assembling robotic hardware components and understanding their connections.
- Participants learned to control DC motors using the L298N motor driver and understood H-bridge wiring for direction control.
- Students implemented PWM techniques to regulate motor speed efficiently.
- Learners calibrated IR sensors and developed logic for accurate line detection.
- Participants designed and tested a working IR line follower robot capable of following predefined paths.
- Students integrated ultrasonic sensors for distance measurement and obstacle detection.
- Participants used servo motor scanning to improve obstacle detection range.
- Learners developed basic collision avoidance logic for autonomous robot movement.
- Students demonstrated simple autonomous navigation by combining motor control and sensor input.
- The workshop improved students' hands-on skills, logical thinking, and confidence in building robotics projects.

Pictures:



Resource person during the session

Students engaged in the workshop

Savithri

DBT Coordinator