

DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

Workshop on "Cloud Networked Robotics."

Participants: 7th - Semester Students Date: 19-09-2025

Brief Description of the Event

On 19th September,2025, our institution in association with the Center of Excellence Lab, Juniper Networks had hosted a workshop on "Cloud Networked Robotics" by Mr.Tarun Y L, R&D Associate-L1, Talentronics Infotech Pvt. Ltd. The workshop provided participants with a strong foundation in robotics, starting from the fundamental concepts to practical applications. Students gained insights into real-world applications of robotics and explored essential components such as chassis, motors, sensors, controllers, and power systems. They also learned about cloud-networked robotics and its potential for enabling intelligent and collaborative robotic systems. By the end of the session, participants understood the concepts of designing, assembling, and programming an obstacle-avoiding robot.

Key Points Covered

- Introduction to Robotics Participants gained an understanding of the basics of robotics and how it is shaping various real-world applications. They also explored the potential of robotics in industries, education, and daily life.
- 2) **Robot Components** The session highlighted the importance of key components such as chassis, motors, sensors, controllers, and power units. Each component's role in enabling robot movement, sensing, and decision-making was clearly explained.
- 3) **Cloud-Networked Robotics** Students were introduced to the concept of connecting robots to the cloud for enhanced intelligence and data sharing. This provided an understanding of how cloud-based systems can enable collaborative and scalable robotic solutions.

4) Concept of Obstacle-Avoiding Robot – Participants understood the design principles and

working mechanism of a 4WD obstacle-avoiding robot. They also learned how sensors and

programming logic can be applied to achieve autonomous navigation.

Outcome

By the end of the workshop, participants gained:

An understanding of the fundamentals of robotics and its real-world applications.

Knowledge of essential components such as chassis, motors, sensors, controllers, and power

systems.

The concept of cloud-networked robotics expanded their awareness of intelligent and

collaborative robotic systems.

The conceptual clarity on the design and working of an obstacle-avoiding robot.

The session motivated participants to take up robotics projects, competitions, and career

opportunities.

Activities Conducted: NIL

No. Of Participants: 68

Winners (if any, for activities conducted): NA

Guest Details (Name, Designation, Organization, Location):

Mr. Tarun Y L, Talentronics Infotech Pvt. Ltd., Bangalore.

The brochure of the event:



Glimpses of the Event







Faculty Coordinator HoD-ISE

Parvathy.S Dr.Vandana.C.P