



**A Report on One-day Hands-on Session on**  
**“Cisco Packet Tracer Skills for All”**

**Organized by**  
**Department of CSE-Artificial Intelligence & Machine Learning**  
**on 25.08.2025**



**Report Submitted by: Mr. V. Sivaraman, Assistant Professor, Department of CSE (AI and ML)**

**Resource Person Details: Mr. A. Udayakumar, Associate Professor & Cisco Certified Instructor, Veltech, Chennai**

**Participants: III CSE (Networks) Students - 56**

**Venue: Seminar Hall – A, AI&ML Lab**

**Mode of Conduct: Offline**

**Report Received on 02.09.2025.**

Department of Computer Science and Engineering (AI and ML) has organized a One-day Hands-on Session on “**Cisco Packet Tracer Skills for All**” program to the students on **25.08.2025**.

**Welcome Address:**

Mr. V. Sivaraman, Assistant Professor, Department of CSE (AI and ML), Madanapalle Institute of Technology & Science (MITS) gave a pleasant and captivating welcoming speech to everyone at 10:00 AM. The program's primary goal is to provide students to understand the network packets tracing through a simulated network environment.

**Keynote Address**

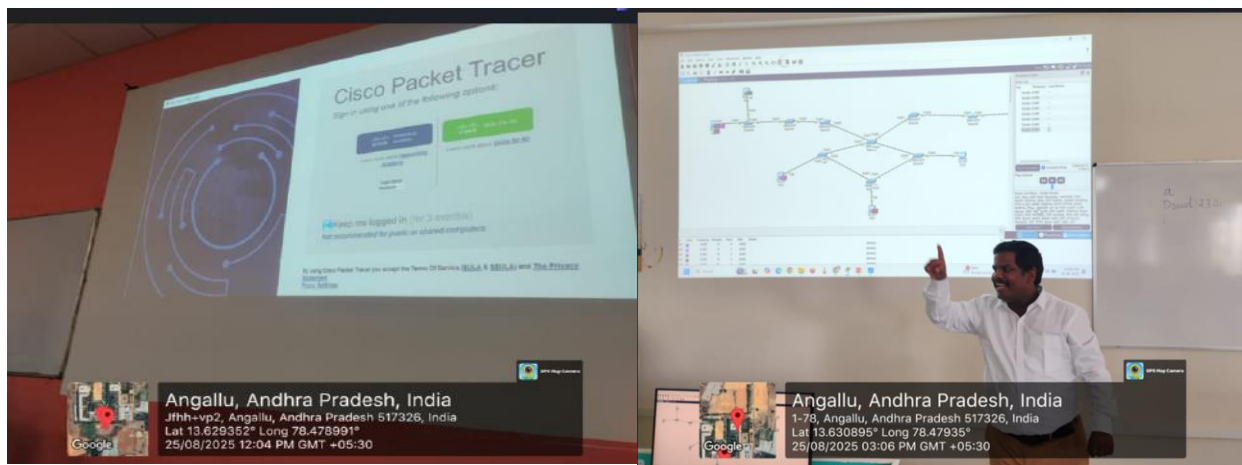
Dr. S. Padma, Associate Professor & Head, Department of CSE (AI and ML), Madanapalle Institute of Technology & Science (MITS), greeted the resource person and encouraged the students to enrich themselves.

She inspired the students to learn skills that are in high demand in the Networking domain. In order to reduce the gap between theory and practice, she also pushed for students to take part in real-world networking projects and industrial training.

**Training session Details**

**Role of Networking in IT, Intro to Cisco Packet Tracer**

- Importance of networking in modern IT infrastructure.
- Device communication across different systems.
- Basics of Cisco Packet Tracer, a valuable simulation tool used to practice networking without needing physical hardware.
- Building a strong foundation for networking certifications like Cisco CCNA.



## Network Types (LAN, WAN, MAN), Network Devices, Interface Tour

- Recognizing the different network types and their real-world applications (e.g., LAN for local offices, WAN for multinational corporations).
- Identification of key networking devices (router, switch, hub, modem) and their functions.
- Navigation of the Packet Tracer interface confidently.
- Gaining hands-on experience by creating and managing networking projects.

## Device Connections, IP Addressing, Ping Testing, Troubleshooting Basics

- Learned to connect various networking devices correctly.
- IP addressing schemes (IPv4, IPv6) and their importance in communication.
- Uses of ping to verify connectivity and diagnose basic network issues.
- Developing the essential troubleshooting skills for resolving network errors.

## Switch & Router CLI Basics, Static Routing, Simulation Mode, Packet Flow

- Learned the command-line interface (CLI) basics for switches and routers—a must-have for network engineers.
- Understanding on static routing and how to configure routes manually.
- Use of simulation mode in Packet Tracer to visualize network behaviour and data movement.
- Analysing the packet flow to better understand how data is transmitted across networks.

## Vote of thanks

With a vote of gratitude, Mr. V. Sivaraman, Assistant Professor, Department of CSE (AI and ML), formally ended the session. He sincerely thanked resource person for sharing his knowledge and experience.

## Outcomes:

### At the end of Workshop, Students can able to

- Understand the Role of Networking in IT.
- Install and configure Cisco Packet Tracer.
- Connect various networking devices correctly.
- Develop the essential troubleshooting skills for resolving network errors.
- Analyze the packet flow to better understand how data is transmitted across networks.

## UN-SDG Mapping:

- Goal-4: Quality Education
- Goal-8: Decent Work and Economic Growth
- Goal-9: Industry, Innovation, and Infrastructure
- Goal-10: Reduced Inequalities