



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)

Industrial Visit to NetApp, Bengaluru

1. Introduction

The Department of Computer Science and Engineering (Data Science), New Horizon College of Engineering, organized an industrial visit to the **NetApp Office, Hoodi, Bengaluru**, on **27th August 2026** for the 7th semester students. The visit was conducted from **10:00 AM to 03:00 PM** with the objective of providing students with practical exposure to advanced technologies, industry practices, research environments, and real-world technological developments.

As the Faculty Coordinator, I accompanied the students and coordinated the activities throughout the visit. The programme provided an excellent opportunity for students to interact with industry experts and understand how concepts learned in the classroom are implemented in enterprise environments.

2. Objectives of the Visit

The major objectives of the industrial visit were to:

- Provide students with exposure to a professional technology organization and its engineering culture.
- Bridge the gap between theoretical learning and practical implementation.
- Introduce students to emerging technologies in cloud data services, AI/ML, cybersecurity, and intelligent infrastructure.
- Create awareness about current industry practices and research-oriented approaches.
- Encourage innovation, critical thinking, experimentation, and continuous learning.
- Provide hands-on exposure through practical security challenges and technical activities.

3. Technical Exposure

NetApp is recognized for its contributions to **cloud data services, intelligent infrastructure, and innovation**. During the visit, industry experts introduced students to the organization's engineering culture, innovation ecosystem, and enterprise security practices.

The technical sessions covered several emerging areas, including **Zero Trust security for AI/ML/LLM workloads using ModelArmor, Dynamic Resource Allocation (DRA) for GPU optimization, Kubernetes AI platform stacks, Multi-Instance GPUs (MIG), and GPU time-slicing**. The experts explained how these technologies are applied in enterprise environments for efficient and scalable **LLM serving and batch inference**.

The sessions helped students understand how modern cloud-native ecosystems and AI workload management can be used to address complex infrastructure challenges. Students also gained an understanding of enterprise-scale containerization and the role of secure distributed systems, intelligent infrastructure, and agentic AI in emerging technological applications.

4. Research and Innovation Interaction

An important component of the visit was the interaction with professionals involved in research and technological innovation. Students were given insights into how research laboratories operate, how experiments are conducted, and how researchers, engineers, and scientists collaborate to develop new technologies.

The interaction emphasized the importance of **innovation, critical thinking, experimentation, and continuous learning** in computer science and data science. It also helped students understand the role of research and technology organizations in developing solutions for areas such as healthcare, automation, communication systems, and intelligent computing.

5. Capture The Flag (CTF) Activity

An interactive **Capture The Flag (CTF)** competition was conducted as part of the industrial visit. The activity was organized around **KubeArmor** and focused on practical cybersecurity challenges. The CTF consisted of three tracks:

1. **Prompt Injection**
2. **Agent Workflow Exploitation**
3. **Uncovering Hidden APIs**

The students worked on real-world vulnerability scenarios involving runtime policies, sandboxing deployments, and decoding artifacts. The activity provided an opportunity for students to apply their technical knowledge, improve their problem-solving abilities, and understand practical aspects of securing modern AI and cloud-native environments. Several students actively participated, making the activity both educational and competitive.

6. Learning Outcomes

The industrial visit enabled students to:

- Gain practical awareness of cloud-native and enterprise technologies.
- Understand security requirements for AI/ML/LLM workloads.
- Learn about Kubernetes, GPU optimization, containerization, and intelligent infrastructure.
- Understand the practical application of Dynamic Resource Allocation, MIG, and time-slicing.
- Gain exposure to research methodologies and industry-oriented innovation.
- Develop problem-solving and cybersecurity skills through the CTF activity.
- Understand the importance of continuous learning and industry-relevant skills.
- Explore specialized career and higher-study opportunities in emerging technology domains.

The interaction with industry experts helped students understand the gap between classroom learning and practical implementation. It also motivated them to explore areas such as **cloud-native technologies and DevSecOps**.

7. Faculty Coordinator's Observation

As the Faculty Coordinator, I observed that the students showed considerable interest and enthusiasm during the technical sessions and interactive activities. The opportunity to directly interact with industry experts helped them gain a better understanding of current technological trends and professional expectations.

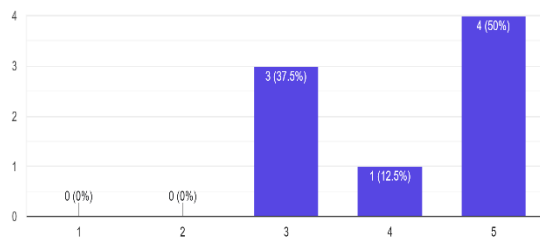
The CTF activity, in particular, encouraged students to apply their theoretical knowledge to practical security scenarios. Such industrial exposure is valuable in developing technical confidence, analytical thinking, and awareness of real-world engineering practices.

8. Conclusion

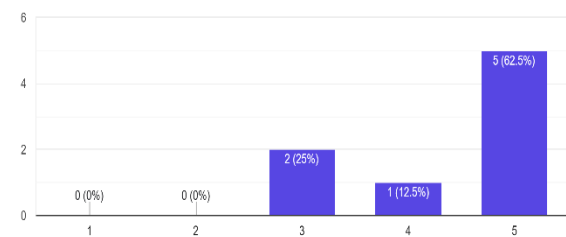
The industrial visit to NetApp, Bengaluru, was a **highly informative, educational, and inspiring experience** for the students. It successfully provided exposure to advanced technologies, enterprise security, AI/ML infrastructure, research practices, and practical cybersecurity challenges.

The combination of expert sessions, research interaction, and the hands-on CTF competition made the visit an enriching learning experience. The programme effectively connected academic learning with industry practices and encouraged students to pursue innovation, specialized technical skills, higher studies, and emerging career opportunities in computer science and data science.

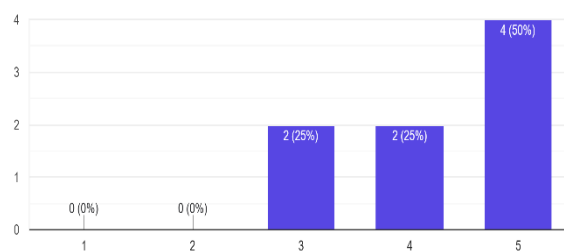
1. Technological Knowledge (specific process/machinery) - pre visiting rating
8 responses



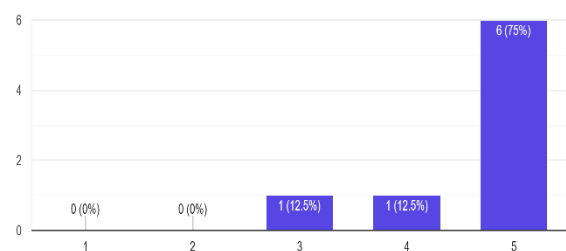
2. Technological Knowledge - Post visiting rating
8 responses



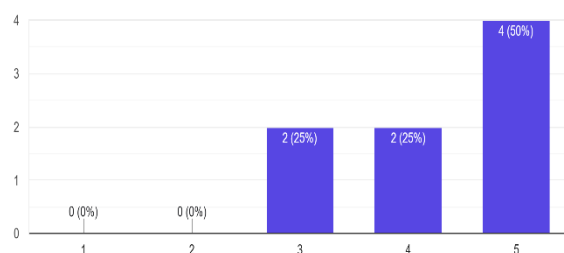
3. Industrial Process Awareness (awareness of production cycle) - Pre visiting rating
8 responses



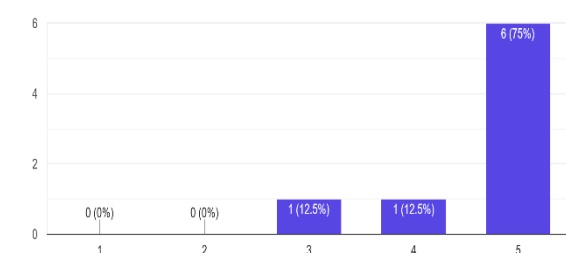
4. Industrial Process Awareness (awareness of production cycle) - Post visiting rating
8 responses



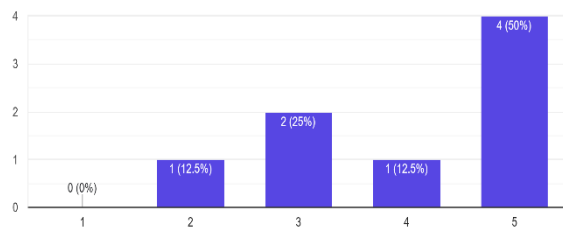
5. Safety protocols (awareness of PPE and safety measures increased)- pre visiting rating
8 responses



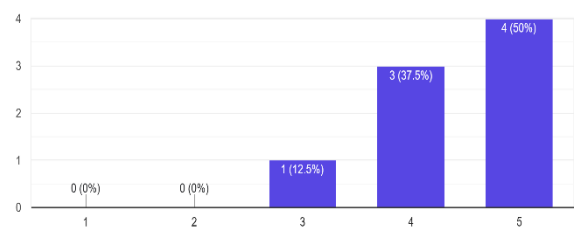
6. Safety protocols (awareness of PPE and safety measures increased)- post visiting rating
8 responses



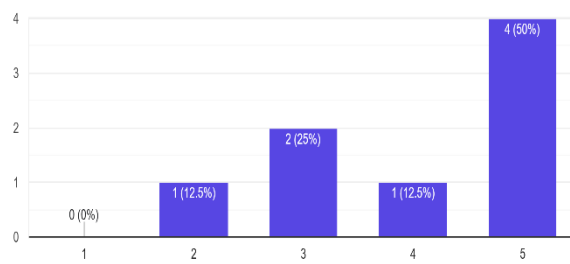
7. career awareness (identified new job roles and internship opportunities)- pre visiting rating
8 responses



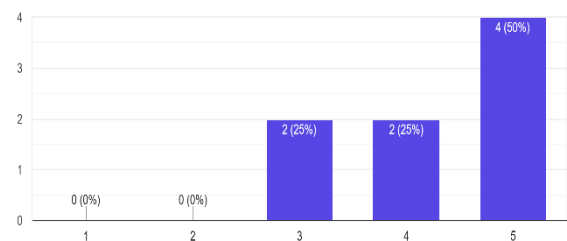
8. career awareness (identified new job roles and internship opportunities)- post visiting rating
8 responses



9. Industry-academia interaction (exchange of contacts, possible collaboration) - pre visiting rating
8 responses



10. Industry-academia interaction (exchange of contacts, possible collaboration) - post visiting rating
8 responses



Faculty Coordinator

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Assistant Professor