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A Report on Industrial Visit to "Quanta Wave Cyber R&D Lab"
Organized by Department of Computer Science and Engineering (Cyber Security)
on 14.10.2026



Report Submitted by: Mr.M.Fathima Begum, Assistant Professor, Department of Computer Science and Engineering (Cyber Security)

Total No. of Participants: 42 Students

Mode of Conduct: Offline.

Faculties Accompanied: Dr. K.P.Maikandan/Associate Professor, Mr.M.Fathima Begum/Assistant Professor, Department of Computer Science and Engineering (Cyber Security)

Introduction

A One-day Industrial Visit to QUANTAWAVE CYBER R&D LAB, Bengaluru was organized for the students of the Department of Computer Science and Engineering (Cyber Security), MITS Deemed to be University on 14th October 2026. The visit aimed to provide students with practical exposure to Data Center Infrastructure, Cybersecurity, Networking Systems, and real-time IT industry practices.

QUANTAWAVE CYBER R&D LAB is a startup-based technology organization focused on Cyber Security, Networking, Artificial Intelligence, and Emerging Technologies. The organization is well known for providing practical training, technical workshops, and industry-oriented learning opportunities for students and young professionals. A total of 42 students participated in this visit, accompanied by two faculty members from the Department of Computer Science and Engineering (Cyber Security).

Objectives of the Visit:

- To provide students with an introduction to Data Center Infrastructure and Cybersecurity concepts.
- To give live exposure to servers, racks, storage, and networking systems used in the IT industry.
- To offer hands-on experience with firewall systems including login, monitoring, and basic policy checks.
- To provide industry insights, career guidance, and an interactive Q&A session with experts.
- To bridge the gap between academic learning and real-world industry applications.
- To enhance technical knowledge and professional awareness among students.

About QUANTAWAVE CYBER R&D LAB:
QUANTAWAVE CYBER R&D LAB is a technology-based startup organization focused on research and development in the fields of Cyber Security, Networking, Artificial Intelligence and Emerging Technologies. The organization provides practical training, technical workshops, research activities, and industry-oriented learning opportunities for students and professionals.

The company aims to bridge the gap between academic knowledge and industry requirements by offering hands-on experience in real-time technologies and modern IT infrastructure. QUANTAWAVE CYBER R&D LAB encourages innovation, technical skill development, teamwork, and problem-solving abilities among students through live projects and interactive technical sessions.

The organization provides a professional startup environment with modern networking infrastructure, server systems, cybersecurity tools, and technical training facilities, enabling students to gain practical knowledge and real-time exposure to advanced technologies used in the IT industry.

Introduction to Data Center Infrastructure and Cybersecurity:
Students were provided with a comprehensive introduction to Data Center Infrastructure and Cybersecurity as the first session of the visit. The technical team of QUANTAWAVE CYBER R&D LAB explained the fundamental concepts of data centers, their role in modern IT systems, and the importance of cybersecurity in protecting organizational data and digital assets.
The session covered key topics such as the components of data center infrastructure, types of servers and storage systems, networking architecture, and basic cybersecurity principles. Students gained a clear understanding of how data centers function in real-time environments and how cybersecurity measures are implemented to safeguard networks and information systems.

- Overview of Data Center Infrastructure and its role in IT industries.
- Introduction to types of servers, storage systems, and networking components.
- Explanation of cybersecurity fundamentals and data protection practices.
- Awareness about real-time implementation of security policies in organizations.
- Students actively participated and clarified their doubts through interaction with the experts.

Live Exposure to Servers, Racks, Storage, and Networking Systems:
Students were given live exposure to the actual server room and networking infrastructure of QUANTAWAVE CYBER R&D LAB. The technical team guided students through the various components of the data centre environment, offering a real-time view of how IT infrastructure is organized and maintained in a professional setting.

- Students observed server racks and the arrangement of servers used in data centre environments.
- The technical team explained the functioning of switches, routers, and networking cables.
- Live demonstration was given on storage systems and data management devices.
- Students observed network connectivity setup and communication between systems.
- Cable management, server maintenance practices, and rack organization were explained in detail.
- Students gained practical knowledge about networking devices and their roles in IT infrastructure.
- The live exposure helped students connect theoretical concepts with real-world implementation.

Hands-on Experience with Firewall Systems – Login, Monitoring, and Basic Policy Checks:
One of the key highlights of the visit was the hands-on experience provided to students on firewall systems. The technical experts at QUANTAWAVE CYBER R&D LAB guided students through the practical aspects of firewall management, including login procedures, real-time monitoring, and basic policy configuration.

- Students were given a live demonstration of firewall login and access control procedures.
- The experts explained the importance of firewalls in protecting networks from unauthorized access and cyber threats.
- Students observed real-time network traffic monitoring using firewall management tools.
- Hands-on guidance was provided on understanding and applying basic security policy checks.
- The technical team explained how firewall rules are configured and managed in a professional environment.
- Students gained practical understanding of network security monitoring and threat prevention techniques.
- The session enhanced students' awareness of cybersecurity tools and their real-time applications.



Industry Insights, Q&A, and Career Guidance:

The visit concluded with an engaging industry insights and career guidance session, where students had the opportunity to interact directly with the technical experts and professionals of QUANTAWAVE CYBER R&D LAB. The session provided students with valuable information about the IT industry, career pathways, and the skills required to succeed in the fields of Cybersecurity, Networking, and Artificial Intelligence.

- An interactive Q&A session was conducted where students raised questions on Cybersecurity, Networking, and AI.
- Industry experts shared insights on current trends and emerging technologies in the IT sector.
- Career guidance was provided on opportunities in Cybersecurity, Data Center Management, and AI.
- Students received advice on technical certifications, internships, and skill development programs.
- Professionals shared their personal experiences and suggested practical steps for career growth.
- Students were encouraged to pursue research, innovation, and continuous learning in their respective fields.
- The session motivated students to align their academic preparation with industry expectations.

Conclusion:

The Industrial Visit to QUANTAWAVE CYBER R&D LAB, Bengaluru was a highly informative and enriching experience for all 42 participating students. The visit effectively covered all planned activities including an introduction to Data Center Infrastructure and Cybersecurity, live exposure to servers and networking systems, hands-on experience with firewall systems, and an interactive career guidance session.

Students gained practical knowledge that complemented their academic curriculum and developed a deeper understanding of real-world IT industry practices. The interaction with industry professionals inspired students to explore career opportunities in Cybersecurity, Networking, and Artificial Intelligence.

Acknowledgement:

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