INDUSTRIAL VISIT

Dates:
11th February 2025

Organized By:
Department of Artificial Intelligence and Data Science, CBIT

Venue:

C-DAC

Overview:
The Centre for Development of Advanced Computing (C-DAC), Hyderabad is a premier R&D organization under the Ministry of Electronics and Information Technology (MeitY), Government of India. It specializes in high-performance computing (HPC), cybersecurity, embedded systems, artificial intelligence (AI), software development, and language computing.

Established to drive advancements in IT, electronics, and computing technologies, C-DAC Hyderabad plays a crucial role in developing indigenous solutions for defense, healthcare, e-governance, and education. It also offers training programs and certifications in cutting-edge technologies, contributing to the nation's skill development initiatives.

Its a free registration, Maximum 100 students are allowed for the visit. hence we take on First Come First serve basis. Register immediately. The visit is planned on 11-02-2025 (10:30 am to 1PM).

Objectives:

- This visit aims to provide students with valuable insights into high-performance computing, artificial intelligence, cybersecurity, and embedded systems, which align with our academic curriculum.
- Utilize the opportunity to visit the esteemed organization. .

Topics Covered:

- Practical Applications and Advanced Cybersecurity Topics
- Overview of cybersecurity and its current trends.
- Understanding Cyber threats and recent attack case studies.
- Implementing security frameworks like NIST and ISO 27001.
- Basics of Cryptography and data protection.
- Effective incident response strategies.
- Ethical Hacking and Penetration Testing Techniques.

Resource Persons:

1. **M Kumar, Scientist-E: Cyber Security and Blockchain Research**

   Cybersecurity research focuses on various aspects, including blockchain technology integration, security audits, and vulnerability research. Key areas of interest include endpoint and mobile security, IoT security in blockchain technology, and security assessment methodologies. The research also involves CERT (Computer Emergency Response Team) and

encrypted agency security**.**Blockchain-based applications like Proq Magnifi are designed to verify genuine applications and enhance security.

2. **Dr.S V Srikanth, Scientist-E:Cybersecurity Threat Analysis and Application**

   Traffic analysis and dynamic analysis methods are used to identify threats, while mobile device management (MDM) helps control device security. Various security solutions are proposed, including visible shark, which is an Android platform for mobile threat assessment. The importance of thread analysis and mobile app security is highlighted, along with significant industry clients like SKI and NPCI.

3. **Tapas Saini, Scientist-E:High-Performance Computing and Emerging Technologies**

   The development of high-performance computing (HPC) and quantum computing is a major focus, aiming for faster and more secure data processing. The research also delves into AI, ML-based expert systems, and cybersecurity measures. Various IoT applications, such as autonomous vehicle systems and water purification, are explored for their potential impact.

4. **Dr.Ramakrishnaiah, Project Officer:Social Development and ICT**

   The role of ICT in social development is emphasized, including projects like Vikaspedia, which focuses on indigenous knowledge dissemination. E-technologies and various training and outreach programs help in building knowledge applications. The adoption of Greenfield contracts and industrial collaboration further strengthens technological advancements.

Various insights from visit are:

Students learned about various cyber threats that individuals encounter in daily life and the essential precautions needed to stay secure online. The session covered different security applications designed to enhance protection against cyber risks, ensuring safe digital interactions. Additionally, explored the role of the Internet of Things (IoT) in Artificial Intelligence (AI), understanding how these technologies work together to drive innovation and efficiency. A significant highlight was learning about India's rapid strides toward digitization and how emerging technologies will shape the country’s future.

The experience provided me with a deeper understanding of cybersecurity, equipping me with the knowledge to navigate the digital landscape securely and responsibly.I learned about various cyber threats that we encounter in our daily lives and how to stay aware and adopt secure practices to safeguard personal and professional data. The session also introduced me to several applications designed for security purposes, highlighting their role in protecting devices and networks.

Participants:
A total of 100 registered for the workshop, with active participation in all sessions.

Organizing Committee:

- **Convener:** Prof. K. Radhika, Head of AI&DS Dept.
- **Faculty Coordinators:**

  1.Dr Sheena Mohammed

  2.Ms Kaneez Fatima

  3.Swathi tejah Yella

  4.Krishna Aravinda

- **Student Coordinators**

  Madhu (4th Year AI&DS -1) & Harika (3rd Year AI&DS -2)

Pictures

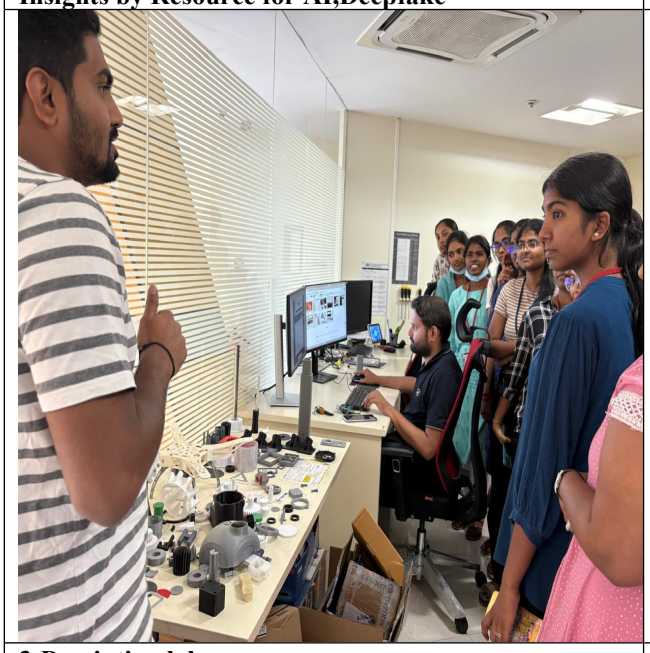
	
Industrial visit Inaugration by Principal	**Industrial visit Inaugration by Hod Dr K.Radhika**

Introduction to C-DAC ,Roles & Responsibility

Faculty & Student at C-DAC

Insights by Resource for AI,Deepfake

Insights from Resourse on Save Internet Day



3-D printing lab

Student in Conference Room

	
Insights by Resource on Iot collaborated to AI	**Student Interaction**

Feedback by students