## **Industrial Visit to "IISC-Open Day"**

### **Department of Information Science & Engineering**

#### **An Autonomous Institute**

Affiliated to Visvesvaraya Technological University, Belagavi

Approved By AICTE, New Delhi

Recognized by UGC with 2(f) & 12(B) status

Accredited by NBA and NAAC

## A Report on the Industrial Visit to "IISC-Open Day"

Date of the Event	1 <sup>st</sup> March,2025
Title of the Event	Industrial Visit to "IISC-Open Day"
Organized by	Dept. of Information Science and Engineering (ISE)

### 1. Introduction

The Indian Institute of Science (IISc), Bangalore, hosts an annual Open Day to showcase its cutting-edge research and technological advancements. In this regard, MVJ College of Engineering has organized an Industrial Visit to the Indian Institute of Science (IISc) Open Day on March 1, 2025. The 3<sup>rd</sup> year ISE students participated in this event. Public Bus with accommodation of 48 seat was arranged for this industrial visit and approximately fifty students from ISE had taken part. We started for IISC at 8:30 am from MVJ college and reached the venue at 10 am. The event provided a great opportunity to explore innovative research projects and interact with scientists and students. After exploring students return from IISC, Bangalore at 3 pm and reached college at 4:30 pm.

In this visit 3<sup>rd</sup> year students have explored various departments, research labs, and exhibitions. The event provided valuable insights into scientific innovations, real-world applications, and career opportunities in research.

### 2. Objectives of the Visit:

- To understand ongoing research in science and technology.
- To interact with scientists, researchers, and students at IISc.
- To explore the latest innovations in various fields such as Computer Science and Engineering, Data Science robotics, artificial intelligence, aerospace, and material sciences.
- To gain exposure to practical applications of theoretical knowledge.



Fig No 1: Glimpses of some cutting-edge projects from Data Science Dept,IISC.

# **Highlights of the Visit:**

- 3. **Departmental Exhibits:** Students and research scholars from various departments, including Computer Science & Automation, Data Science, Electronics Engineering, Material Science, Civil Engineering etc. showcased their research projects and innovations.
- 4. **Live Demonstrations:** Students from different departments executed live experiments which was integral part of attraction in this visit.
- 5. **Interaction with Experts:** IISc researchers and professors explained complex scientific concepts in an interactive manner.

6. **Technical Workshops:** Some departments conducted workshops on emerging technologies, providing hands-on experience.



Figure 2: Bambu Lab X1 Carbon 3D Printer

This Bambu Lab X1 Carbon 3D Printer features:

- High-Speed Printing: It can reach print speeds up to 500 mm/s.
- Multi-Material Capability: It can print with a variety of materials, including PA, PC, PET, TPU, carbon fiber, and glass fiber reinforced polymers.

• AI Features: Some models have AI-powered features such as error detection and first-layer inspection.

As ISE students they first visit to the Department of Computational and Data Sciences (CDS), where several interesting projects related to biomedical image analysis and artificial intelligence, etc. was demonstrated. One of the most notable projects was automated needle segmentation in ultrasound-guided biopsy, which showcased how AI can assist in medical procedures by improving accuracy and efficiency.

Apart from modern technologies, students got a glimpse of computing history. They experience old versions of computing hardware such as the ThinkPad 380, first-generation hard disk, CPU fan, motherboard and many more. These devices gave us an idea of how computer hardware has evolved over time.



Fig No:3 Pics of Hard Disk, Sun file server.



Fig no 4: Mechanical Keyboard

Mechanical keyboards use individual mechanical switches for each key, offering various types with different actuation forces, travel distances, and sound profiles.

# **Key Learnings:**

- Exposure to real-time scientific experiments and their applications.
- Understanding the interdisciplinary nature of research and its significance in solving global challenges.
- Insights into career opportunities in scientific research and academia.
- Awareness of the latest technological advancements and their societal benefits.

### 5. Conclusion:

The visit to IISc Open Day was an enriching experience, offering a glimpse into the world of scientific exploration and technological advancements. It motivated us to delve deeper into research-driven learning and explore innovative ideas. We extend our gratitude to IISc for organizing this event and providing us with such an informative and inspiring experience.

The IISc campus is extremely vast, and due to time constraints, students were unable to visit all the departments in a single day. However, the visit was still highly enriching, as students were able to witness groundbreaking research and learn about various technological advancements.

## 6. Acknowledgment:

I would like to thank our institution MVJCE for organizing this visit and IISc, Bangalore on behalf of students. Special thanks to the faculty and researchers who shared their valuable knowledge and insights with us.

## **Faculty Coordinator of the Event:**

Mrs. Sayani (Asst Professor, Dept. of ISE)

Ms. Anupama P (Asst Professor, Dept. of ISE)

### **Outcome of the Event:**

- The industrial visit to IISc Open Day was a highly educational and insightful experience for the students.
- Students gained exposure to cutting-edge research in Data Science, Artificial Intelligence, Electronics etc.
- Hands-on workshops and live demonstrations provided real-world applications of theoretical concepts.
- Students engaged with IISc researchers and faculty members, understanding complex scientific concepts interactively.
- The visit provided students with insights into career opportunities in research, academia, and industry.
- Exposure to historical and modern computing technologies helped students understand the evolution of hardware and software advancements.
- The visit inspired students to explore research-driven learning and technological innovation.



Fig No 5: Faculties with some students from ISE team.