

IIT Bombay, Mumbai  
Maharashtra, India - 400076

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## Professional Experience

- Teaching Assistant** **Indian Institute of Technology Bombay** Aug 2023 – Nov 2023  
Course: CS101, Computer Programming and Utilization
- Guided students in learning programming languages and **concepts in C++**, facilitating their understanding
  - **Awarded** with "Excellence in Teaching Assistantship", troubleshoot XServer and WSL setup for **200+ students**
- Full Stack Developer** **Trubuddyy Solutions Pvt. Ltd.** Jul 2023 - Aug 2023
- Developed a mentor **search system** with best match sorting for using weighted **fuzzy string matching**
  - Automated **Zoom** meet scheduling, **Whatsapp** and **SMS** reminders using **Twilio**, and **Stripe** Payments
- Frontend Developer** **Application Software Centre, IIT Bombay** May 2023 – Jul 2023
- Engineered a **micro-frontend architecture** enabling independent development teams to work for MyIITB
  - Developed **support for 5+** JavaScript frameworks, including Angular, React, and SystemJS using **Single-SPA**

## Education

**Indian Institute of Technology, Bombay** Mumbai, Maharashtra  
Dual Degree (B.Tech & M.Tech) in Electrical Engineering [CPI 7.86/10], Graduating: 2026  
Minor Degree in Computer Science and Engineering  
Relevant Coursework: Digital Signal Processing, Image Processing, Computer Vision, Advanced Image Processing, Communication Systems, Data Structures & Algorithms, Design & Analysis of Algorithms, Logic in Computer Science, Introduction to Machine Learning, Code Optimization for Object-Oriented Languages,

## Technical Projects

- Mess-I: Mess Digitalization System** | DevCom IIT Bombay May 2023 – Present
- Led the development of the **official** mess management system of IIT Bombay with **10,000+** daily active users
  - Deployed the system in **14** out of 16 hostels, in **20+** devices, recording **4,000,000+** meals and **16K+** users
- MongoDB Google Drive Backups** | DevCom, IIT Bombay Jul 2024
- Orchestrated a Python **library** to save compressed and **encrypted** MongoDB backup files on Google Drive
  - Implemented **file hash (SHA-265)** verification to ensure file integrity and prevent tampering
- Java Program Analysis using Soot** | Prof. Manas Thakur, IIT Bombay, CS6004 May 2024
- Utilized **Soot framework** for various **inter and intra-procedural** analysis for Java programs and bytecodes
  - Programmed an analysis transformer to remove redundant null checks from a Java program and generate transformed class and **jimple** files. Used **Eclipse OpenJ9 JVM** to track performance improvement.

## Position of Responsibility

- Overall Coordinator** **DevCom, IIT Bombay** Apr 2024 – Present
- Led a team of **30+ designers and developers** to maintain and enhance IIT Bombay's digital infrastructure.
  - Resolved **IP conflicts** in servers by collaborating with Computer Centre, benefiting **10,000+** residents.
  - Upgraded **Proxmox** VE to **version 8**, ensuring better performance and reliability of servers and LXC containers

## Skills, Interests & Extra Curriculars

### Development

**Proficient:** Dart, Flutter, Python, C++, React, JavaScript, Django, Flask, Micropython

**Familiar:** VHDL, Soot, TypeScript, NextJS, Angular, Vue, MATLAB, JAVA, OpenCV, Selenium

**Tools:** Umami, Sentry, New Relic, Proxmox, Docker, Linux, Algolia, Elastic search, MongoDB, AWS, GCP

**AI/ML tools:** LLaMa-2, YOLOv5, FAISS, Chain-Lit, Langchain

**Interests:** Drama, Theatre, Music, Fine Arts, Literature

- Achieved 2nd position in inter-hostel stage play and street play competitions in academic year 2022-23.
- Represented IIT Bombay in the dramatics contingent in the InterIIT Cultural Meet 5.0, scoring 2nd overall.