IIT Bombay, Mumbai

Maharashtra, India - 400076

Abhijat Bharadwaj

keymii.github.io ● github.com/keymii

+91 9315457956

bharadwaj.abhijat@yahoo.com

Professional Experience

Teaching Assistant　　　　**Indian Institute of Technology Bombay**　　　　Aug 2023 – Nov 2023

Course: CS101, Computer Programming and Utilization

- Guided students in learning programming concepts in C++, facilitating their understanding of the subject
- Awarded with "Excellence in Teaching Assistantship", troubleshot 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 **fuzzy string matching** and **weights**
- Automated **Zoom** meet scheduling, **Whatsapp** and **SMS** reminders using **Twilio**, and **Stripe** Payments

Frontend Developer　　　　**Application Software Centre, IIT Bombay**　　　　May 2023 – Jul 2023

- Researched and Engineered a micro-frontend architecture enabling independent development teams 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+ mobile devices, recording 4,000,000+ meals and 16K+ users

MongoDB Google Drive Backups | DevCom, IIT Bombay　　　　Jul 2024

- Developed 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

- Leading a team of 30+ designers and developers responsible for maintaining the crucial digital infrastructure of IIT Bombay. Overseeing software design, development, deployment, and maintenance.
- Assisted system administrators and Computer Center IITB in resolving IP conflict in gymkhana servers affecting 10K+ residents Upgrading proxmox ve to version 8 and monitoring lxc-container health.

Skills & Interests

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 2022-23.
- Represented IIT Bombay in InterIIT Cultural Meet 5.0 in the dramatics contingent, scoring 2nd overall.