Utakarsh Mani Tripathi

Mumbai, Maharashtra, India

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EDUCATION AND CERTIFICATIONS

KJ Somaiya School Of Engineering
B. Tech in Computer Science and Business Studies - Present

St. Xaviers Inter College
10th – ICSE Board, 2022

HSC- Sarashwati Vidya Mandir- State Board
12th Science – 2024

SKILLS

Languages - Java, Python, C & Javascript

Developer Tools - VS Code, IntelliJ, Git, Github, Canva, Figma, Postman and MS Office

Technologies/Frameworks - Spring & SpringBoot, Flask, Node js, Express js, MongoDB, Tkinter, Numpy

Other - Computer Networks, Arduino Programming, Frontend(Basics) & Data Structures And Algorithms, GraphQL, gPRC

EXPERIENCE

FY Intern SSRP- Somaiya Space Research Project   **Sep-2024 - Jan-2025**
- Designed and developed PCB layouts for embedded systems.
- Worked with Arduino, microprocessors, and sensors for real-world aerospace applications.
- Programmed and tested hardware using Arduino IDE.
- Gained experience in data communication protocols and antenna technologies.

Smart India Hackathon   **SIH-2024**
- Assisted team in planning and executing the project, ensuring adherence to project timelines.
- Created a Supply chain tracking and Inventory Management Software.
- Contributed to both Frontend and Backend development.

SVF Backend Intern   **May-2025 - July-2025**
- Led a backend team of 8 developers to build a Node.js and Express backend with Sequelize and MySQL for a full-stack internship portal with role-based access control.
- Implemented secure REST APIs for auth, job posting, applications, and search, while collaborating closely with frontend teams to ensure seamless integration and delivery.
- Added admin controls, input validation, and a modular codebase to support scalable development and maintainable routing structure.

PROJECTS

LCR(LeetCode Revision Module) - Java (GitHub)
- Built a Spring Boot backend with MongoDB to assign personalized daily LeetCode problems using secure REST APIs and Basic Auth.
- Developed a CLI tool for submitting solved problems directly from the IDE, with real-time notifications via WebSockets to improve user experience.
- Optimized database queries with Caffeine caching and designed logic to suggest questions based on consistency, weak topics, weak solved questions for revision and provide user insights.

ByteMe - Express & Node js (GitHub, Live)
- Built a Node.js and Express backend with MongoDB to manage decentralized school operations like fees, events, and campus shop through secure REST APIs.
- Added QR-based payments and fingerprint authentication for enhanced security, alongside wallet-based login and tamper-proof activity logging.

Room Automation - ESP32 & Arduino Nano
- Designed an integrated system using ESP32 and Arduino Nano to automate room essentials, optimizing energy usage by turning off devices when unoccupied and restoring them upon detecting occupancy, including dynamic light intensity control based on ambient conditions.

INTERESTS
- **Connecting**
- **Research**
- **Programming**
- **Reading & Learning**
- **Documentation**

SOFT SKILLS
- Organizational and time-management skills.
- Ability to work independently and as part of a team.
- Leadership and Team Management.
- Communication and Documentation.
- Efficiently managing various tasks simultaneously.