

Sakshi Mittal

+91 7409803649 | sakshimittal753@gmail.com | [LinkedIn](#) | [GitHub](#) | [Portfolio](#) | [LeetCode](#)

Software Engineer building scalable, production-ready systems with React, Node.js, and Python – shipping REST APIs, microservices, JWT-secured auth, and Docker/Kubernetes deployments in Agile, Git-driven engineering workflows.

EDUCATION

VIT Bhopal University

B.Tech in Computer Science (9.15 CGPA)

Sep 2023 – May 2027

Bhopal, MP

TECHNICAL SKILLS

- **Languages:** Java, JavaScript, Python, C++, SQL
- **Frontend:** React, Next.js, Vite, HTML/CSS
- **Backend:** Node.js, Express.js, FastAPI, REST API design, Socket.IO, JWT, OAuth2, MVC architecture
- **Databases & Infra:** PostgreSQL, MongoDB (Mongoose, Atlas), Redis, Docker, Kubernetes
- **Tools & Workflow:** Git/GitHub, Postman, Swagger, Agile/Scrum, SDLC best practices
- **Familiar with:** LLM API integration (Gemini API) for feature-level enhancements

EXPERIENCE

CSE Intern – FOSSEE Summer Fellowship 2026, IIT Bombay

May 2026 – Jul 2026

Kubernetes-Based eSim Session Lifecycle Management

Remote

[Certificate](#)

- eSim Cloud's shared Django+NGSPICE backend let one user's simulation slow or crash the system for everyone.
- Architected a **FastAPI Session Manager microservice** on isolated, auto-scaling Kubernetes pods – managing pod lifecycle via the Kubernetes Python client with Redis TTL cleanup, containerized in Docker.
- Eliminated cross-user crash risk, validated with **11 passing unit tests**, resolving **2 critical** deployment issues on a live Minikube cluster.

CSE Intern – FOSSEE Semester Long Spring Internship 2026, IIT Bombay

Feb 2026 – May 2026

PCB Manufacturability Risk Analyzer (KiCad Plugin)

Remote

[Certificate](#)

- PCB designers had no early way to catch manufacturability flaws before fabrication, leading to costly redesigns.
- Developed the **PCB Manufacturability Risk Analyzer**, a Python KiCad plugin using the **pcbnew** API to auto-detect **4 flaw categories**: thermal, EMI, routing, and current-capacity risks.
- Merged into FOSSEE's open-source [eSim-KiCad-Plugin](#) repo, adopted community-wide, cutting manual inspection effort.

PROJECTS

Saarthi.ai – AI-Powered Shop Ledger & Analytics | React, Node.js, MongoDB, Gemini API

2026

[GitHub](#) | [Live Demo](#)

- Small shop owners rarely track sales, expenses, stock or credit in any formal system.
- Built a multi-tenant MERN platform with a Gemini-powered quick-add pipeline (text/voice/photo), validated server-side, with JWT and Google OAuth.
- Automated **4** rule-based alerts (stock, revenue, expense, category) and an append-only udhaar ledger, deployed on Render.

LastMile Tracker – Zone-Based Delivery Platform | React, Node.js, MongoDB, JWT

2026

[GitHub](#) | [Live Demo](#)

- Delivery platforms need dynamic pricing, scalable agent assignment, and tamper-proof tracking to run reliably.
- Built a **3-role** (Customer/Agent/Admin) MERN platform with a configurable rate engine (zone detection, volumetric weight, rate cards) and JWT auth.
- Shipped an append-only **TrackingHistory** schema (Mongoose-enforced immutability) with automated email/SMS alerts, deployed on Render.

Shift Zero – Real-Time Industrial Safety Platform | React, Node.js, Socket.IO, MongoDB

2026

[GitHub](#) | [Live Demo](#)

- India logs **6,500+** fatal industrial accidents yearly (DGFASLI), most within 2 hours of shift changeover from poor handover visibility.
- Engineered a **Verbal-Sensor Mismatch** engine cross-checking handover notes against live sensor data via Socket.IO, with a real-time React dashboard.
- Surfaced safety blind spots within **seconds**, removing manual cross-checking between reports and sensors.

CERTIFICATIONS

- ServiceNow Virtual Internship Program – [View Certificate](#)