

MANISH RATHAUR

📍 Nainital, Uttarakhand | 📞 +91-81929-54081 | ✉️ mrathaur704@gmail.com | [in LinkedIn](#) | [🔗 GitHub](#) | [🌐 Portfolio](#)

Education

Bachelor of Technology — Computer Science & Engineering **Expected May 2026**
Graphic Era Hill University, Bhimtal **CGPA: 7.83 / 10**
Relevant Coursework: Data Structures & Algorithms, OOP, DBMS, Operating Systems, Computer Networks, AI, Machine Learning

Experience

Open Source Android Developer *Remote | Nov 2024 – Feb 2026*
Organic Maps — open-source navigation app used by millions (Android / Java)

- Improved Android UI quality for a globally used app by implementing **2 Java features** and fixing production bugs, with **5+ PRs merged** by core maintainers — reflecting production-level code standards.
- Reduced onboarding friction for new contributors by actively participating in issue triage and maintainer discussions over **15 months**, building mastery of Git branching, code reviews, and large-scale OSS workflows.
- Demonstrated initiative by applying to **Google Summer of Code (GSoC)**, contributing 3–4 months of structured feature work to the organisation beyond standard contributor expectations.

Projects

Carbon Pulse — Digital Carbon Footprint Tracker [📺 Live Demo](#)

- Architected a **3-service microservices system** (Spring Boot + Node.js + React) with independent deployable units, IEA-compliant **@tgwf/co2** calculations, and H2 persistence for continuous tracking.
- Eliminated data loss across **50+ test scenarios** via a Recharts dashboard with 10-second polling and **circuit breaker and retry patterns** for uninterrupted downstream fault resilience.
- Validated service correctness by writing **JUnit unit tests** for the Spring Boot layer and all REST endpoints via **Postman automated test collections**.

Tech: Spring Boot, Java, Node.js, React, REST APIs, Microservices, H2, Recharts, Tailwind CSS, JUnit, Postman

Tab Story — AI-Powered Browser Tab Management Extension [🔗 Live — Chrome Web Store](#)

- Shipped a **privacy-first Chrome extension with active real-world users** by building 100% local AI tab clustering via Chrome's Built-in AI API — zero user data leaves the device.
- Reduced tab-loss to zero by engineering a **crash recovery system** with automatic session backups and timeline restoration, validated across multiple browser crash scenarios.
- Increased organisation speed by designing a **domain-based grouping algorithm** with fallback logic using Chrome Tabs and Side Panel APIs.

Tech: JavaScript, Chrome Extension (Manifest V3), Chrome Built-in AI API, Chrome Storage & Tabs APIs

OmniSupport AI — Cloud-Native Intelligent Support Platform [🔗 GitHub](#)

- Architected a **6-service Spring Boot microservices platform** with auth, ticketing, notifications, analytics, API gateway, and service discovery for horizontal scalability.
- Secured inter-service communication using **JWT, Spring Security, RBAC, and Eureka** — enforcing least-privilege access across all distributed boundaries.
- Designed an **event-driven Kafka pipeline** for async notifications and analytics, and an **AI-inspired ticket prioritization engine** for AUTO HIGH/CRITICAL classification.
- Containerized full stack via **Docker Compose** (PostgreSQL, Kafka, Zookeeper) enabling production-style local orchestration and end-to-end integration testing.

Tech: Java, Spring Boot, Spring Security, JWT, Kafka, PostgreSQL, Docker, Eureka, API Gateway, Microservices, Maven

Skills

Languages	Java, JavaScript, Python, SQL	Frontend	React, HTML5, CSS3, Tailwind CSS
Backend	Spring Boot, REST APIs, Microservices, JDBC, Hibernate, OOP, Design Patterns, Multithreading	Databases	MySQL, PostgreSQL, H2, Query Optimisation
AI / ML	LangChain, RAG, FAISS, HuggingFace, OpenAI Whisper	Testing	JUnit, Selenium, Playwright, Postman, Manual & Automation
Android	Android SDK, RecyclerView, Fragment Lifecycle, SharedPreferences	DevOps	Docker, Kubernetes (basics), Git, Maven, CI/CD
Tools	IntelliJ, VS Code, Android Studio, FastAPI, Chrome Extension APIs		

Certifications

- Optimising Generative AI with LangChain & Hugging Face** — Udemy *LLM pipelines, prompt chaining, model optimisation, AI system design*
- 100 Days of Code: Python Bootcamp** — Udemy *Python programming , NumPy, Pandas*

Achievements & Leadership

- Led and organised **3+ academic hackathons** at Graphic Era Hill University, mentoring **20+ peers** in software development, system design, and coding best practices.
- Recognised for production-level code quality at **Organic Maps** — a globally used open-source project — with all submitted PRs reviewed and merged by the core maintainer team.