

Sujay Babu Tumu

☎ 7396359103 | ✉ Email | 🌐 Portfolio | 🐙 GitHub | 🔗 LinkedIn | 📄 LeetCode | 📺 GFG

SUMMARY

Software Development Engineer specializing in scalable **backend systems** and database optimization. Experienced in designing **low-latency REST APIs**, implementing secure authentication mechanisms, and building production-ready applications handling **thousands of daily requests**. Strong foundation in **Data Structures** and **system design** fundamentals.

EDUCATION

Degree/Certificate	Institute/Board	CGPA	Year
B.Tech. CSE	Indian Institute of Information Technology, Nagpur	7.5/10	2022-26

EXPERIENCE

SDE Intern – TripFactory

Jan 2026 - Present

Tech: Core Java, Servlets, JSP, Hibernate (ORM), PostgreSQL, JDBC, REST APIs

Bengaluru

- Built scalable backend modules using **Core Java and Servlet** architecture handling **5K+ daily requests**.
- Optimized **PostgreSQL queries** and indexing strategies, reducing average **API response time** by **30%**.
- Implemented **Hibernate ORM** with entity mapping and **transaction management** ensuring **ACID compliance**.
- Integrated secure **REST APIs** with role-based authorization, improving workflow automation efficiency by **25%**.
- Conducted load testing using **JMeter** to validate performance stability under **concurrent user traffic**.

SDE Intern – LabelLift

Oct 2025 - Nov 2025

Tech: React.js, Node.js, Next.js, Cloudinary, Git, JavaScript

Remote

- Reduced platform **load time** by **40%** through frontend optimization and **lazy loading** strategies.
- Improved backend processing speed by **35% via query optimization** and efficient API design.
- Built real-time features using **Socket.io** supporting **10K+ active users** with stable concurrent connections.
- Designed scalable **REST APIs** capable of handling **high concurrency** traffic with improved reliability.

PROJECTS

Enterprise Work Management & Intelligence Platform

Nov 2025 - Dec 2025

Tech Stack: Java 17, Spring Boot, React, PostgreSQL, Hibernate, Docker

[GitHub](#)

- Architected full-stack system managing tasks with **RBAC-based workflows** across Manager and Engineer roles.
- Designed scalable **REST APIs** with **JWT** authentication ensuring modular and maintainable services.
- Optimized PostgreSQL schema using **indexing and query tuning**, reducing average query latency by **28%**.
- Implemented **audit logging** and concurrency-safe status updates ensuring **transactional consistency**.
- Integrated **Redis caching** layer reducing repeated database reads and improving API response time under high load.

Nomads — Group-Based Travel Booking Platform

Jan 2026 - Feb 2026

Tech Stack: Spring Boot, Java, PostgreSQL, Next.js, Razorpay, Mapbox

[GitHub](#)

- Engineered a booking system with **transactional consistency** to prevent double-booking under concurrent requests.
- Implemented **asynchronous processing** for booking confirmations to improve responsiveness during peak traffic.
- Built secure Spring Boot REST APIs with JWT-based authentication and role-based access control.
- Designed normalized PostgreSQL schema ensuring **ACID compliance** for booking and payment workflows.

Multi-Vendor Food Delivery App

Aug 2025 - Sept 2025

Tech Stack: MERN Stack, JWT, REST APIs, MongoDB

[GitHub](#) | [Deploy](#)

- Built a scalable MERN-based food ordering platform supporting vendor onboarding and role-based access control.
- Designed modular REST APIs achieving **<200ms average latency** under simulated concurrent traffic.
- Optimized MongoDB performance using **indexing, pagination, and query optimization** for large product datasets.

SKILLS

- Languages:** Java, C++, Python, C
- Backend Development:** Spring Boot, **Hibernate (ORM)**, Node.js, Express.js, REST APIs, Redis, JWT
- Databases:** PostgreSQL, MongoDB, MySQL, **Indexing**, Query Optimization
- System Design & Architecture:** RBAC, Microservices Architecture, Concurrency, **Caching Strategies**
- Core Computer Science:** Data Structures & Algorithms, Operating Systems, DBMS, OOP
- DevOps & Cloud:** Docker, **AWS** (EC2, S3), CI/CD, Git

ACHIEVEMENTS

- Solved **400+ DSA** problems across **LeetCode (Rating: 1630+)** and **GFG** with proficiency in **DP, Graphs** and **Trees**.
- Won **INTSO National Gold Medal (Top 1% nationwide)** and secured top ranks in **EAMCET (TS: 2036, AP: 2218)**.