

# Saurabh Vishwakarma

contact@saurabhvishwakarma.in | LinkedIn | Github | Portfolio | 7000729488

## EXPERIENCE

### Software Development Engineer Intern

Jan 2024 – Dec 2024

Blue Mango Labs

Bhopal, India

- Architected and implemented a high-performance REST API using FastAPI that can process 100K+ daily requests for an astrology application, reducing response times by 40%.
- Spearheaded the implementation of Domain-Driven Design patterns, resulting in 60% improved code maintainability and enabling the team to ship new features 30% faster.
- Successfully integrated LiveKit for real-time video streaming and voice calls, achieving 99.9% uptime and supporting 1000+ concurrent users with sub-second latency.
- Orchestrated AWS EC2 deployment with Nginx load balancing, resulting in 45% improved application performance and 99.95% system availability.
- Designed and implemented a scalable media management system using AWS S3, handling user-generated content with 99.99% durability.
- Implemented real-time messaging infrastructure using EMQX (MQTT), achieving message delivery latency under 100ms and supporting 10K+ concurrent connections.
- Used Langchain for an AI-powered response system, integrating Anthropic and OpenAI models.

## PROJECTS

### Echo Harvest | Python, Socket.io, GI Repository, PostgreSQL, Redis

Mar 2024

- Designed and built a real-time music activity monitoring system that tracks Playerctl daemon events, processing 1000+ events/minute with 99.9% accuracy.
- Implemented bidirectional real-time data streaming using Socket.io, achieving 50ms latency.
- Developed a high-performance caching layer using Redis for track metadata, reducing database load by 70% and improving response times by 60%.

### Sonnet | React, FastAPI, PostgreSQL, DaisyUI, Google Maps API

Sept. 2024

- Developed a high-scale logistics platform supporting 50M+ users with OAuth2 security, achieving 99.9% uptime and 200ms response times.
- Optimized location services with Google Maps API integration, reducing address errors by 75% and improving delivery accuracy by 40%.
- Built real-time notification system which can handle daily alerts with 100ms latency, boosting driver response rates by 45%.
- Implemented real-time tracking system processing 10M+ daily updates, achieving 99.9% accuracy and reducing delivery disputes by 60%.

### Academic Evaluation System | Python, FastAPI, PostgreSQL, React, React Charts, Tailwind

Jan. 2024

- Architected an academic analytics platform using React and FastAPI, can serve 500+ users with 99.9% uptime and 200ms response times.
- Developed dynamic grade visualization dashboards using React Charts, reducing data comprehension time by 40% for students and faculty.
- Engineered role-based authentication system with FastAPI and JWT, enabling secure access to 10K+ grade records.

## EDUCATION

### Rajiv Gandhi Proudlyogiki Vishwavidyalaya University

2021 - Present

Bachelor of Technology in Computer Science Engineering

7 CGPA

## SKILLS

**Languages:** Python, Java, C, C++, JavaScript, Shell Scripting, Lua.

**Frameworks:** FastAPI, Flask, Django, React Js., Electron Js, Langchain.

**Tools and OS:** Linux, Git, SSH, Grafana, Nginx, Docker, Github Actions, Memcached, Kafka.

**Cloud Platform:** AWS, Heroku, Render, Netlify, Azure.

**Databases:** MongoDB, Redis, PostgreSQL, MySQL.