

# Sourav Rajvi

Bangalore | [souravrajvi@gmail.com](mailto:souravrajvi@gmail.com) | +91-6377278247 | [LinkedIn](#) | [Github](#)

## EDUCATION

### Bangalore Institute of Technology

Bachelor of Engineering in Electronics and Communication Engineering

2024

## EXPERIENCE

### Software Engineer

Nov 2024 – Present

AGSuite Technologies

- Architected **AWS** middleware integrating **NetSuite** with **Zoho Books**, processing 10,000+ PDFs daily using **EC2 Auto Scaling**, **SQS**, **Lambda**, **S3**, and **RDS PostgreSQL**, achieving 99.9% uptime and 75% faster processing.
- Deployed infrastructure with **CloudFormation** and **CloudWatch** monitoring, implementing **S3 lifecycle policies** reducing storage costs by 60% while maintaining audit compliance.

### Associate Software Engineer

May 2024 – Nov 2024

AGSuite Technologies

- Integrated **Large Language Model** capabilities using **OpenAI API** with **prompt engineering** and **response streaming** to automate document analysis and data extraction for 1,000+ financial records daily, reducing manual data entry by 70%.
- Built **LLM middleware service** with **Node.js** and **Express.js** implementing **rate limiting**, **error handling**, and **retry logic** for robust API integration.
- Developed **RESTful API endpoints** using **RESTlet** and **Suitelet** scripts in **NetSuite** to process LLM responses and integrate with backend workflows.
- Implemented **token optimization** strategies and **response caching** mechanisms, reducing API costs by 40% while maintaining processing accuracy.

## PROJECTS

### TaskMaster - Distributed Task Scheduling System | Node.js, gRPC, PostgreSQL

- Architected **microservices** task scheduler with **Node.js**, **gRPC**, and **PostgreSQL**, supporting horizontal scaling to 50+ workers processing 1,000+ concurrent tasks with sub-10ms latency.
- Implemented **round-robin load balancing** and **heartbeat failure detection**, achieving zero data loss through automatic task reassignment.
- Built **RESTful API** with real-time monitoring, optimizing **PostgreSQL queries** with **SKIP LOCKED** achieving <100ms latency.

### LSM Database Engine | TypeScript, Node.js

- Engineered **LSM Tree** storage engine in **TypeScript** achieving 3,500 ops/sec write throughput and <1ms read latency, implementing database primitives used in **Cassandra** and **RocksDB**.
- Optimized read performance by 90% through **Bloom filter** integration (92% hit rate) and **sparse indexing**, reducing disk I/O across 1,270+ lines of code.
- Built **Write-Ahead Log** crash recovery and **multi-level compaction** strategy, reducing read amplification by 50% and disk usage by 30-40%.

### IPO Tracker System | Node.js, Express.js, MongoDB

- Developed real-time IPO tracking platform with **Node.js** processing live market data feeds, implementing **WebSocket** for sub-second updates to 500+ concurrent users.
- Built **RESTful API** with **Express.js** integrating financial data providers, implementing **Redis caching** reducing response time by 65%.
- Designed **MongoDB pipeline** processing 100K+ records with optimized indexing achieving <50ms query times.

## TECHNICAL SKILLS

**Backend Technologies:** Node.js, Express.js, NestJS, RESTful APIs, gRPC, Microservices, WebSocket

**Languages:** JavaScript, TypeScript, Python, C++, Java

**Cloud & Infrastructure:** AWS (EC2, Lambda, S3, SQS, RDS, CloudWatch, Auto Scaling), CloudFormation, Docker

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

**Tools & DevOps:** Git, GitHub Actions, Docker, Jest, CI/CD

## ACHIEVEMENTS

- Earned a LeetCode rating of 1905 by solving over 500 complex algorithmic challenges; positioned in the top 10%.