

AJAY SINGH TAKNET

Software Engineer — Backend & Fintech Systems

📍 Bangalore, India ✉ aajaysinghdev745@gmail.com 📞 +91-9829561803 🌐 GitHub 🔗 LinkedIn

Experience

GoldenPi Tech

Nov 2022 – Present

Software Engineer — Fintech Bond Trading Platform

Bangalore, India

- Built and scaled **end-to-end bond trading systems** covering inventory management, pricing, RFQ flow, order execution, payment capture, and settlement for **400,000+ customers**
- Integrated **NSE RFQ APIs**, collaborating with NSE teams to enable real-time quote generation, exchange order placement, and audit-compliant workflows
- Designed and implemented a **dynamic bond pricing engine** with real-time calculations and markup logic, improving margin efficiency by **20%**
- Developed **RM Hierarchy Management System** using Nested Set Model in MongoDB, improving hierarchy reads and reporting performance by **40%**
- Engineered **Razorpay Virtual Account system** for automated fund collection, increasing transaction success rates by **25%**
- Implemented **Cashfree payment gateway** including refunds, payouts, settlements, and ICCL fund transfers
- Built automated **payment reconciliation pipelines** ensuring **99.9% financial accuracy** and reducing manual effort by **80%**
- Migrated HTML-to-PDF generation service to **AWS Lambda**, reducing infrastructure cost by **30%** and improving scalability
- Integrated **RabbitMQ** for async workflows and notifications, reducing processing latency by **40%**
- Designed MySQL **data purging strategies** using stored procedures, reducing database size by **40%**
- Developed internal **Python scripts** for transaction validation, reconciliation reports, and operational analytics
- Built lightweight **Python utilities** for batch processing, CSV reconciliation, and financial reporting automation

Projects

HTML to PDF Serverless Service

2024

Node.js, Puppeteer, AWS Lambda

- Developed a high-performance HTML-to-PDF conversion service using Puppeteer Core on AWS Lambda
- Optimized Lambda memory usage and cold-start performance for large-scale document generation
- Designed stateless architecture supporting concurrent PDF generation

Payment Reconciliation & Reporting System

2024

Python, Pandas, PostgreSQL

- Built a Python-based reconciliation system to match payment gateway transactions with internal order records
- Processed large CSV datasets using Pandas and generated mismatch reports for finance teams
- Automated daily reconciliation workflows, reducing manual effort and financial discrepancies

RM Hierarchy Management System

2023

Node.js, MongoDB, Nested Set Model

- Built a hierarchical RM-client relationship system enabling efficient tree traversal and reporting
- Used Nested Set Model to support fast reads and complex hierarchy queries

Technical Skills

Languages:

JavaScript, TypeScript, Python, Java, C++

Backend:

Node.js, Express.js, REST APIs, Microservices

Frontend:

React.js, Next.js, Angular, HTML5, CSS3, JavaScript (ES6+)

Databases:

MongoDB, MySQL, PostgreSQL, Redis

Cloud & DevOps:

AWS (Lambda, EC2, S3), Docker, Serverless

Messaging & Tools:

RabbitMQ, Git, Metabase

Python Stack:

Pandas, Data Processing, Automation Scripts

Domain:

Fintech, Bond Trading, Payments, NSE Integration

Education

Sobhasaria Engineering College

2019 – 2023

Bachelor of Technology in Computer Science Engineering

Rajasthan, India