

# Kaustubh Ajgaonkar

Goa | +91-9096730500  
Linkedin | Github | Scaler | My Portfolio  
kaustubhajaonkar43@gmail.com

## Skills

**Languages:** Java, Python, SQL

**Frameworks & Libraries:** Spring Boot, Spring Security, Spring Cloud, JPA/Hibernate, OAuth2

**Architecture & Design:** REST API, Microservices, Multithreading/Concurrency, Caching Strategies

**Databases:** MySQL, PostgreSQL, Redis

**Tools & Infrastructure:** Git, Docker, Kafka, AWS (Elastic Beanstalk, RDS), Pytest, Testcontainers, JUnit

## Experience

### Software Developer

Mar 2025 – Present

#### Optel Group

- Developed robust Python connectors using internal frameworks, integrating multiple data sources for enterprise serialization systems and ensuring reliable data flow for critical business operations
- Resolved a data consistency defect in a pharmaceutical site management platform, tracing stale reads to a missed cache invalidation path across synchronized services and restoring correctness for downstream site operations
- Implemented comprehensive testing suites using Pytest for unit and integration tests, achieving 99% system reliability and significantly reducing production bugs
- Led root cause analysis and resolution of high-priority production issues, minimizing customer impact and contributing to long-term fixes
- Refactored Core Legacy framework code to reduce technical debt by 25%, accelerating the release cycle for critical client features by 15%
- Collaborated with development teams using Git version control and participated in code review processes, contributing to improved code quality and team knowledge sharing

### Software Configuration Engineer

Apr 2021 – Feb 2025

#### Optel Group

- Designed and configured track-and-trace systems using XML and Python for pharmaceutical clients
- Designed, Configured and tested systems, providing support throughout all stages of the project life cycle, reducing support calls by 80%

## Projects

**E-Commerce** (Spring Boot, Spring Cloud, MySQL, JPA/Hibernate, Redis, Razorpay, Stripe, JUnit, Kafka)

→ <https://lnk.bio/kaustubh43>

- Architected a Microservices based E-Commerce Platform with Login, Authorization, Product Catalog, Payment Gateway Integration, Service Discovery, and Notification Service
- Deployed on AWS Elastic Beanstalk with RDS for data persistence
- Implemented event-driven Email notification service using Kafka, processing simulated bursts of 10,000+ messages/minute with no data loss
- Optimized product catalog API endpoints, reducing response times from 500ms to 20ms by implementing Redis caching

**Distributed Auth Service** (Java, Spring Boot, Spring Security, OAuth2, JWT, MySQL, JPA/Hibernate, Redis, Testcontainers, Docker)

→ <https://github.com/kaustubh43/distributed-auth-service>

- Built a distributed authentication service issuing JWT access tokens (RS256 asymmetric signing) and refresh tokens via Spring Security OAuth2 Authorization Server
- Cached refresh tokens in Redis for low-latency validation; persisted user credentials in MySQL with Docker Compose for containerized multi-instance deployment
- Validated distributed behavior across service boundaries with Testcontainers integration tests

**Distributed Rate Limiter** (Java, Spring Boot, Redis, Lua, Python, Multithreading/Concurrency)

→ <https://github.com/kaustubh43/distributed-rate-limiter>

- Built a distributed rate limiter backed by Redis, using Lua scripting for atomic operations to guarantee correctness across concurrent instances
- Returns HTTP 429 on limit breach; validated with Python test scripts for configurable request loads and sleep intervals

## Education

### Woolf University

Expected October 2026

MS, Computer Science

### Goa University

2020

BE, Electronics and Telecommunications