

Praveer Nagaraja Byndoor

Syracuse, NY | (315) 395-5316 | pbyndoor@syr.edu

[linkedin.com/in/praveerbn](https://www.linkedin.com/in/praveerbn) | github.com/praveerbn12 | praveer-portfolio.vercel.app

WORK EXPERIENCE

Software Engineer, Coditas Solutions LLP

Aug 2022 – Dec 2024 | Pune, India

EshopBox — E-commerce Payment & Integration Platform (GCP)

Jan 2024 – Dec 2024

- Designed and scaled Java backend services on GCP App Engine handling **10k+ products** and **5k–10k daily transactions** across 11+ marketplace partners, using **Spring Boot**, Hibernate, and **PostgreSQL** tuned via HikariCP connection pooling.
- Automated asynchronous reconciliation workflows using **GCP Pub/Sub** and Cloud Scheduler, cutting manual intervention by **60%** and enabling reliable processing.
- Architected resilient payment integration with **idempotent transaction handling**, exponential-backoff retry via Spring Retry, and structured audit logging across services.
- Integrated **11+ external APIs** behind **Resilience4j** circuit breakers, ensuring fault tolerance and low-latency responses across payment services.
- Operated production systems in a **24/7 on-call rotation**, responding to critical incidents with Cloud Monitoring metrics and structured logs, maintaining **mean time to resolution under 30 minutes**.

Ambry — Healthcare Reporting Platform

Jun 2022 – Jun 2023

- Delivered and maintained **15+ RESTful Java APIs** on Spring Boot serving **1k+ users**, reducing response times by **~20%** through Spring Data JPA query optimization and Redis caching.
- Optimized **PostgreSQL** schema, trimming report generation time by **35%** through strategic indexing, batch fetching, and query execution plan analysis.
- Developed a comprehensive unit and integration test suite using **JUnit 5** and **Mockito** with automated Postman scripts, catching regressions across release cycles.
- Secured patient data with **Spring Security JWT** authentication, role-based access control, and full audit logging; resolved **60+ code-quality issues** via SonarLint.

OneView — Interview Scheduling System

Jun 2023 – Dec 2023

- Launched a scalable interview scheduling system integrating **Spring Boot** with the **Google Calendar API** via OAuth 2.0 and webhooks, serving the entire organization's hiring workflow.
- Implemented **JWT-based authentication** with 24-hour access and 7-day refresh tokens ensuring secure, stateless request validation via the Spring Security filter chain.
- Engineered resilient API integration with automatic retry backoff and **Resilience4j** fallbacks, sustaining uptime under third-party rate limits.
- Reduced developer onboarding time by **50%** through clear API documentation and technical specs covering design decisions and tradeoffs.

PROJECTS

Understudy — Agent Autonomy Control Plane

Python, FastAPI, PostgreSQL, Kafka, MCP, Docker, GCP

- Built a shadow-mode control plane that runs **LLM agents** against live operator decisions and mechanically promotes/demotes per-action autonomy (SHADOW → SUGGEST → AUTO) via Wilson-interval agreement bounds and a cost-weighted error model, enforcing autonomy at the **MCP tool boundary**.
- Engineered a deterministic reliability layer (finite-state lifecycle, **idempotency keys**, retries, **circuit breaker**); a mid-stream business-rule change was auto-detected via rolling-window agreement regression and demoted the agent within **~40 cases** before any human noticed.
- Created an intervention-mining pipeline that clusters human overrides and uses an **LLM** to hypothesize the implicit rule, backtesting each against decision history before approval, converting **200+ manual corrections** into **6 validated deterministic rules**.

Hotel Review System — Microservices Platform

Spring Boot, Spring Cloud, Kafka, Redis, Docker

- Architected a microservices backend using **Spring Boot** and **Spring Cloud** with **6 services**, **Feign**-based inter-service communication, and JWT authentication enforced at the gateway.
- Lowered hotel-detail read latency by **~80%** using **Redis** caching and implemented an event-driven pipeline with **Apache Kafka** for asynchronous processing of review and payment events.
- Developed an **AI-powered review summarization** feature generating sentiment analysis and top praises/complaints; containerized with **Docker Compose** and covered critical flows with **Testcontainers** integration tests.

EverWear — Peer-to-Peer Clothing Rental Marketplace

Next.js, React, TypeScript, Supabase, Vercel

- Shipped a full-stack marketplace (live at everywear-psi.vercel.app) using **Next.js**, **React**, **TypeScript**, and **Supabase**, with role-based dashboards for Buyer, Seller, and Admin.
- Designed marketplace logic including an **escrow-style credit system**, double-booking prevention, and admin listing-approval controls.
- Delivered the production MVP end-to-end through **AI-collaborative development with Claude Code** and **GitHub Copilot**; won a Syracuse University sustainability competition.

TECHNICAL SKILLS

- Languages** — Java, Python, SQL, TypeScript, JavaScript, C, C++ (coursework)
- AI & Agentic Systems** — LLM integration, MCP (Model Context Protocol), agentic control planes, prompt engineering, sentiment analysis, AI-assisted development (Claude Code, Cursor, GitHub Copilot)
- Backend & APIs** — Spring Boot, Spring MVC, Spring Data JPA, Spring Security, Hibernate, FastAPI, Django REST Framework, REST APIs, OAuth 2.0, JWT
- Distributed Systems** — Microservices, event-driven architecture, Apache Kafka, GCP Pub/Sub, idempotency, retries & backoff, circuit breaker, finite-state machines, service discovery, fault tolerance, high availability
- Databases** — PostgreSQL, MySQL, Redis, DynamoDB, query optimization, schema design
- Cloud & DevOps** — GCP (App Engine, Pub/Sub, Cloud Scheduler, Cloud Build, Cloud Monitoring), AWS (Lambda, DynamoDB, SNS, EventBridge, API Gateway, S3), Docker, CI/CD
- Testing & Observability** — JUnit 5, Mockito, Testcontainers, pytest, structured logging, integration/regression testing, Postman
- Frontend & Full-Stack** — Next.js, React, TypeScript, Supabase, Vercel
- Tools** — Git/GitHub, Jira, Maven, IntelliJ IDEA, VS Code, Agile/Scrum

EDUCATION

Syracuse University, School of Information Studies — M.S., Information Systems | GPA 4.0

Expected Dec 2026 | Syracuse, NY

Coursework: Applied Machine Learning, Database Management, Information Systems Analysis, Information Management & Technology.

Vishvesvaraya Technological University — B.E., Chemical Engineering | GPA 3.5

Jul 2022 | Bengaluru, India

CERTIFICATIONS

- Certificate of Advanced Study: Applied Data Science, Syracuse University | Dec 2025