

Avinash Rapolu

SENIOR SOFTWARE ENGINEER — BACKEND & AI SYSTEMS

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Backend engineer with **5+ years** building commerce platforms on SAP Commerce Cloud, Java, and Spring Boot — now designing AI and agentic systems (LLM applications, Model Context Protocol servers) and a headless commerce platform of my own. Strong across the full SDLC: architecture, third-party integration, data modeling, search, and performance — with a track record of owning systems end to end and turning complex requirements into secure, maintainable design.

CORE SKILLS

LANGUAGES	Java, Python, Groovy, SQL, JavaScript
BACKEND & APIS	Spring Boot, Hibernate, REST / SOAP, Microservices, OAuth2, Model Context Protocol (MCP)
AI & AGENTIC	LLM application design, prompt engineering, agent tool design, natural-language & vector search, RAG
COMMERCE	SAP Commerce Cloud (Hybris), headless commerce, catalog / order / promotion, collaborative & B2B commerce, Mirakl / TREX
DATA & SEARCH	OpenSearch, SOLR, search relevance tuning, PostgreSQL, NoSQL, migration scripting
CLOUD & DEVOPS	AWS / AWS CLI, SFTP integrations, cronjobs & scheduled jobs, Kibana
TOOLS	IntelliJ IDEA, Git / BitBucket, Postman, GitHub Copilot, Amazon Q, SendGrid, Jira / Confluence

EXPERIENCE

CJSS Technologies

Software Developer

Dec 2021 — Present · Hyderabad

AI Travel Assistant

CJSS

Python · React · LLM orchestration · Configurable prompts

- Built a conversational travel assistant that produces end-to-end trip itineraries and live flight options through natural-language chat.
- Designed a configurable AI layer where LLMs and prompts are managed from the React admin console, letting the business retune assistant behavior with no redeploy.
- Normalized flight and itinerary data from provider APIs into structured, agent-consumable responses.

SAP Order-Placement MCP Server

CJSS

Java · SAP Commerce APIs · Model Context Protocol · OAuth

- Designed a Model Context Protocol server over existing SAP Commerce APIs that lets an AI agent place orders through a small, intent-level tool surface instead of dozens of raw endpoints.
- Closed data-leakage risk by filtering every response before it reaches the model and keeping all credentials and privileged calls inside the MCP boundary — the agent never sees secrets or raw customer data.
- Preserved SAP's native business rules and security model while making the ordering flow fully agent-driven.

ShopTogether — Collaborative Multi-User Cart

CJSS

[SAP Commerce Cloud](#) · [Java](#) · [Spring](#) · [REST](#)

- Architected ShopTogether, a collaborative shopping model where one shopper creates a shared cart and multiple buyers join by link — each contributing their own sub-cart that merges into a single coordinated order.
- Designed the full lifecycle: personal and campaign-driven list creation, buyer invites with a join pre-landing page, staff-managed per-user entries, cart locking, and real-time stock validation across shared entries.
- Built the shared pricing and checkout flow — final-price push to each buyer, committed-stock handling, and per-user price breakdowns — exposed through a clean set of REST APIs.

Corporate Sales — B2B Bulk Ordering

CJSS

[SAP Commerce Cloud](#) · [Java](#) · [SOLR](#) · [REST](#)

- Built a secured B2B corporate-sales channel that lets approved clients browse a dedicated catalog and place bulk orders through a role-gated ordering flow.
- Implemented the corporate cart and enquiry pipeline — product search and suggestions, cart management, and bulk-order enquiry submission — with a product validation and pricing path kept separate from the consumer storefront.

TREX Marketplace Integration

CJSS

[SAP Commerce Cloud](#) · [Java](#) · [Mirakl](#) · [Spring Boot](#) · [AWS](#)

- Led the end-to-end integration of TREX, a custom marketplace replacing Mirakl, owning the migration and integration phases.
- Engineered flexible data models and a forward-compatible integration strategy that cut deployment frequency by 50%.
- Built real-time sync APIs and full / partial import jobs across products, shops, and orders — lifting real-time update throughput 50% and consignment efficiency 60%.

WOW'S by ISC — Auction Commerce

CJSS

[SAP Commerce Cloud](#) · [Java](#) · [SOLR](#) · [REST](#)

- Delivered a bidding / auction storefront end to end: custom auction and wishlist types, event-driven background processing, and a full REST API built to Figma spec.
- Automated activity-triggered merchant notifications via cronjobs and SendGrid.

Platform Engineering — Data, Inventory & Sales

CJSS

[SAP Commerce Cloud](#) · [Java](#) · [AWS](#) · [SFTP](#) · [SendGrid](#)

- Automated merchant inventory sync over SFTP with proactive error alerting, cutting backorders and improving fulfillment 30%+ across 15+ merchants.
- Built compliance-driven user-data management jobs and optimized SQL for a 70% reduction in execution time; secured outputs with password-protected files.
- Modernized legacy SAP Hybris modules (CAG), reducing operating cost and improving performance ~30%; documented workflows and onboarded new engineers.

Srida Infotech Pvt. Ltd. Software Engineer

Jun 2021 — Dec 2021 · Hyderabad

Atkore — Enterprise Data Management

[Oracle Hyperion DRM / DRG](#) · [EDMCS](#) · [Oracle SQL](#)

- Built DRM versions, hierarchies, property definitions, and action scripts; implemented validations, node access groups, and conditional workflows to enforce data governance.

INDEPENDENT PROJECT

Capsule Commerce

Solo · Headless Commerce Platform

Spring Boot · React · OpenSearch · OAuth

- Architected and built a headless commerce platform solo — a Spring Boot backend with a React admin console / back-office designed to be friendly for both engineers and customer-support teams.
- Implemented core commerce domains end to end: product, catalog & category, order, and promotion management, with OAuth, session management, and audit logs.
- Built a developer-platform layer with Groovy scripting and cronjobs / scheduled jobs, plus flexible faceted search.
- Engineered a modern search stack on OpenSearch — tunable relevance profiles, instant search, and AI natural-language + vector search.

EDUCATION

B.Tech, Electrical & Electronics Engineering

Bapatla Engineering College
2016 – 2021

LANGUAGES

English · Hindi · Telugu