

SHIVAM BHAI PATEL

Systems & Backend Engineer

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PROFESSIONAL SUMMARY

Systems and Backend Engineer with 4+ years of experience engineering autonomous developer tooling, distributed data ingestion pipelines, and enterprise JVM backends. Proven track record refactoring enterprise retail workforce systems at Zebra Technologies, building self-healing browser automation engines across 50+ business entities at a single client, and architecting multi-agent SDLC orchestration platforms.

TECHNICAL SKILLS

Backend & Systems: Java (8/11/17/21), Spring Boot 3, Spring Security, Microservices, JVM Tuning & Profiling, REST APIs, WebSockets, Node.js.

Frontend & Automation: Next.js 15/16, React, TypeScript, JavaScript, Playwright, Chrome Extensions (Manifest V3), Electron, Tailwind CSS.

Databases & Infrastructure: PostgreSQL, MySQL, SQLite (WAL mode), Redis, BullMQ, Docker, Jenkins CI/CD, AWS (S3, EC2), Flyway, Linux/Bash.

Architectural Patterns: Multi-Agent Orchestration, Event-Driven Architecture, Task DAGs, Self-Healing Automation, Monolithic vs Distributed Design.

WORK EXPERIENCE

Independent Systems & Software Consultant

Apr 2024 – Present

Self-Employed · Remote (Prayagraj, India)

- Architected SyntraFlow (powered by FlowTrace), an enterprise browser automation and regression execution engine deployed across 50+ business entities at a single client for FirstCron Services Pvt Ltd.
- Engineered a three-tier execution system (Chrome MV3 extension + desktop daemon + Playwright replay engine) with self-healing DOM selector heuristics, reducing test maintenance overhead by 40%.
- Diagnosed database execution bottlenecks and refactored Spring Boot query paths for SamMegh Technologies, cutting endpoint latency from ~800ms to <300ms.
- Integrated role-based access control (RBAC), deterministic DOM state capture, and automated PDF audit report generation for enterprise compliance.

Software Engineer

Nov 2021 – Mar 2024

Reflexis Systems (Zebra Technologies) · Pune, India

- Maintained and scaled high-throughput workforce management and store operations platforms serving 150K+ daily retail workers across 400+ enterprise store locations.
- Refactored legacy monolithic services into domain-aligned microservices with isolated persistence boundaries and clean REST contracts.
- Overhauled automated Jenkins CI/CD deployment pipelines, cutting production release cycles from bi-weekly to under 2 days.
- Conducted JVM profiling, heap dump analysis, and garbage collection tuning, boosting peak transaction throughput by 30%.

KEY PROJECTS & SYSTEMS

Workflow Studio — Autonomous Multi-Agent SDLC Orchestrator

TypeScript, Node.js, SQLite, Atlassian APIs

- Engineered an autonomous task decomposition engine that ingests unstructured PRDs and computes dependency-ordered task DAGs.
- Implemented an isolated Git branch provisioner, zero-trust automated reviewer agent, and bidirectional Jira/Bitbucket webhook synchronizers.
- Enforced strict package isolation behind @workflow-studio/core, eliminating UI symbol leaks via Node-only tsconfig.

PracharFlow — Parametric Template Composition Engine

Java 21 · Spring Boot 3 · Skija (Skia) · PostgreSQL · Telegram

- Designed a deterministic graphic rendering engine replacing generative diffusion for Indian regional languages (Devanagari/Gujarati).
- Achieved 100% deterministic pixel-perfect output rendering in under 150ms per creative asset on GPU/raster surfaces.

DealDekho — E-Commerce Price Tracking & Telemetry Engine

Next.js 15, TypeScript, PostgreSQL, Redis, BullMQ

- Architected multi-aggregator product search and price tracking paired with verified client telemetry from the ShopLens extension.

EDUCATION & CREDENTIALS

Post Graduate Diploma in Advanced Computing (PG-DAC)

CDAC Pune (2021)

Bachelor of Technology (B.Tech) in Electrical Engineering

M.J.P. Rohilkhand University (Aug 2016 – Nov 2020)