

Harshwardhan Patil

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Overview

Full-Stack Engineer with 3+ years of experience building scalable, production-grade systems with a focus on backend architecture, cloud deployment, and system design for real-world applications.

Education

University of Texas at Arlington *Master's in Software Engineering*

Expected May 2026

Technical Skills

Languages / Databases: Java, SQL, TypeScript, JavaScript, PostgreSQL, Redis, Database indexing, Query optimization

Web Engineering: Angular, Spring Boot, Spring Security, REST APIs, API design & versioning, WebSocket, AuthN/AuthZ

Cloud & DevOps: AWS (EC2, ECS, S3, RDS, Secret Manager), Docker, CI/CD, Jenkins, GitHub Actions, Nginx

Testing & Security: JUnit, Jasmine, SonarQube, Postman, JWT, RBAC, HTTPS/TLS, CORS, CSRF/XSS protection

Design & Architecture: System Design, Low-Level Design, Design Patterns, SOLID principles, database schema design

Professional Experience

Software Engineer, Clarivate Analytics – Bangalore, India

Aug 2023 – Aug 2024

- Delivered reusable **Angular** modules and **Spring Boot APIs** for reporting, reducing duplicate code by **80%**.
- Refactored legacy modules into clean, **modular architectures**, lowering long-term maintenance costs.
- Optimized **PostgreSQL** schemas and queries, reducing latency by **40%** for large-scale analytical reports.
- Automated **CI/CD pipelines** using **Docker**, **Jenkins**, and **Spinnaker**, deploying **50+ releases** with zero rollbacks.
- Designed and enforced secure authentication using **JWT** and **Spring Security**, strengthening access control across services.
- Mentored **2 junior engineers** through pair programming and code reviews, doubling sprint throughput.

Associate Software Engineer, Clarivate Analytics – Bangalore, India

Aug 2021 – Jul 2023

- Built **Angular** charts and reusable table components integrated with **Spring Boot APIs** for advanced search and reporting features.
- Bootstrapped an **Angular frontend** application with **Dockerized CI/CD pipelines**, enabling automated builds and **AWS deployments**.
- Standardized reusable frontend modules adopted across **5+ teams**, reducing onboarding time by **50%**.
- Optimized **PostgreSQL** queries and indexing strategies, improving data retrieval performance by **30%**.
- Implemented secure authentication and request-handling mechanisms (**JWT, CORS, CSRF protection**), along with input validation standards.
- Increased test coverage to **90%+** using **Jasmine** and **JUnit**, reducing production defects by **25%**.
- Deployed containerized applications to **AWS ECS/EC2** with hardened security group configurations.

Projects

Employee Management System (EMS)  

Dec 2024 – Nov 2025

Enterprise-grade full-stack employee management platform with real-time metrics and automated cloud deployment.

- Built and deployed a scalable full-stack employee management platform using **Spring Boot**, **Angular**, **PostgreSQL**, **AWS**, **Docker**, **GitHub Actions**, and **Jenkins**.

Battle Arena – Real-Time Multiplayer Platform 

May 2024 – Present

Browser-based artillery platform with modular architecture, terrain-aware physics, and extensible multiplayer.

- Developed a modular real-time multiplayer game platform using **Angular**, **Phaser 3**, **Spring Boot**, **Node.js**, **MongoDB**, **WebSockets**, **Docker**, and **AWS**.

AI-Powered Personal Finance Manager 

Feb 2025 – Apr 2025

Full-stack personal finance platform leveraging banking data and AI-driven insights for budgeting, analysis, and planning.

- Created a full-stack personal finance manager using **Flask**, **Streamlit**, **Redis**, **Plaid API**, **Docker**, and **AWS**, integrating live banking data, analytics, and AI-driven insights.