Gagan Deep Reddy Reddivari

Senior Full Stack Developer | Location: Bloomington, IL **| Phone:** +1(309) 261-6120 **|**
Email: Gagandeepreddyr123@gmail.com **Links:** LinkedIn **|** GitHub **|** Medium **|** Portfolio

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EXECUTIVE SUMMARY

Accomplished Senior Software Developer with over 8 years of hands-on experience in the design, development, and deployment of high-performance Java-based enterprise solutions and web applications. I possess deep expertise in building scalable, secure, and robust backend architectures using Java, Spring Boot, Spring MVC, and Hibernate. My background includes a strong focus on cloud-native development across AWS, GCP, and Azure, utilizing serverless technologies like Lambda and Cloud Functions to drive efficiency.

I have demonstrated practical experience building high-performance microservices in Golang and developing rich, responsive user interfaces with React 18, leveraging Hooks, Context, and Redux for optimal developer experience and performance. A proven technical leader, I excel in cross-team collaboration, mentoring developers, and guiding UI/UX strategy while balancing speed of delivery with engineering best practices in Agile environments. I am passionate about applying AI to real-world business use cases, with specific skills in integrating Large Language Models (LLMs) and Vector Databases into enterprise workflows.

TECHNICAL SKILLS MATRIX

Category	Technologies & Tools
Languages & Scripting	Java (Core/Advanced), Golang (Go), JavaScript (ES6+), TypeScript, SQL, Python (Scripting), HTML5, CSS3
Backend Frameworks	Spring Boot, Spring MVC, Spring Cloud, Hibernate ORM, Node.js, Express.js, Golang (Gin, Echo), gRPC, .NET
Frontend Technologies	React.js (Hooks, Context, Redux, React Query), Angular, Redux Toolkit, Responsive Web Design
Cloud Platforms	**AWS:** EC2, S3, RDS, Lambda, API Gateway, DynamoDB **GCP:** Cloud Functions, Pub/Sub, Cloud SQL, Firestore **Azure:** App Service, Azure SQL, Cognitive Services
Databases & Storage	**Relational:** PostgreSQL, MySQL, Oracle, SQL Server **NoSQL:** MongoDB, DynamoDB, Redis, Cassandra **Vector:** Pinecone, FAISS, Weaviate
DevOps & CI/CD	Jenkins, Docker, Kubernetes, Terraform, GitHub Actions, Git, Maven, Gradle, JFrog Artifactory

Category	Technologies & Tools
AI & Machine Learning	LangChain, LangSmith, AWS Bedrock, OpenRouter AI, Embeddings, Transformer Models (BERT, GPT, T5), Generative AI
API & Security	RESTful API Design, GraphQL, JWT, OAuth2, Postman, JMeter, Microservices Security
Testing & Quality	JUnit, Mockito, TestNG, Karate, Selenium WebDriver, SonarQube
Methodologies	Agile (Scrum, Kanban), SDLC, TDD, Domain-Driven Design (DDD)

PROFESSIONAL EXPERIENCE

Hyundai Motor Company | *USA*

Role: Senior Full Stack Developer

Duration: Apr 2025 – Present

Project: Vehicle Personalization and Remote Feature Control Platform This project involved building a cloud-connected application that enables users to manage personalized vehicle settings—such as drive modes, climate preferences, and seat positioning—directly through the My Hyundai Bluelink app. The system integrates directly with vehicle firmware and backend infrastructure to allow for seamless remote feature activation and profile management.

Key Responsibilities & Achievements:

- **Full Stack Architecture & Development:**
    - Spearheaded the development of a full-stack personalization platform, enabling secure remote configuration for vehicles across North America via web and mobile interfaces.
    - Designed and documented comprehensive REST and GraphQL APIs secured with JWT/OAuth2, supporting high-volume personalization lookups and feature toggles.
    - Leveraged AWS Lambda and API Gateway to optimize asynchronous workflows, effectively reducing backend load during off-peak hours.
    - Modeled and optimized relational data schemas using PostgreSQL, maintaining sub-second query response times even under average loads of ~2,000 API requests per hour.
- **Frontend Engineering (React 18):**
    - Built rich, responsive frontend views using React 18, utilizing Hooks, Context API, and React Query to manage state for Driver Profiles and Remote Features.
    - Focused on ensuring a responsive User Experience (UX) and created accessible UI components to meet compliance standards.
- **Microservices & Performance Engineering:**
    - Productionized high-performance Golang services equipped with health/readiness probes, graceful shutdown mechanisms, and Kubernetes Horizontal Pod Autoscaling (HPA).

- Designed worker pools and implemented back-pressure using Golang goroutines and channels, which improved system throughput under heavy load tests.
- Refactored legacy service modules to improve readability and maintainability, successfully reducing cyclomatic complexity scores by approximately 15%.

- **DevOps & Automation:**
  - Automated CI/CD pipelines using Jenkins, Docker, and Infrastructure-as-Code (IaC) templates, which reduced deployment time by 60% and enabled a consistent bi-weekly production release cadence.
  - Achieved a record of zero rollback incidents due to rigorous automated testing and deployment strategies.
- **Quality Assurance & Leadership:**
  - Created extensive unit and integration tests using JUnit, Mockito, and TestNG to support stable builds and reduce manual regression efforts.
  - Mentored junior developers by conducting code reviews and providing technical guidance, which shortened the onboarding time for new team members.
  - Authored internal documentation and API references, enabling new team members to contribute within their first sprint.

Environment: Java, Spring Boot, Hibernate, React.js, TypeScript, PostgreSQL, AWS (Lambda, API Gateway), Docker, Jenkins, RESTful APIs, JWT, OAuth2, Golang, Kubernetes.

Ford Motor Company | *USA*

Role: Full Stack Developer

Duration: Feb 2024 – Mar 2025

Project: Intelligent Customer Feedback Analytics & Action Engine (CFA^2) I built a full-stack enterprise platform designed to ingest, analyze, and route customer feedback data from multiple channels, including web forms, email surveys, call center transcripts, and social media. The system enables marketing and operations teams to respond with automated or human-initiated actions and was deployed across multiple automotive OEMs and B2B clients to improve customer satisfaction and brand loyalty.

Key Responsibilities & Achievements:

- **Backend Design & Hybrid Cloud Storage:**
  - Designed scalable backend APIs using Java (Spring Boot) and Hibernate to ingest complex feedback data from Salesforce, internal CRM systems, and third-party NLP services.
  - Architected a hybrid cloud storage solution utilizing AWS RDS for structured metadata and DynamoDB for unstructured feedback blobs, optimizing analytics performance.
  - Deployed scalable microservices with a modular architecture, enabling the rapid onboarding of new B2B clients across various industries.
- **Frontend Development & Visualization:**

- Led feature development for analytics dashboards using ReactJS, leveraging Redux Toolkit and React Query to significantly improve load times and user experience.
- Enabled customer journey analytics by building an internal ticketing workflow with timeline visualization, which improved client response times to feedback.
- Collaborated with data teams to expose data marts to Power BI users and created APIs to sync processed data into enterprise reporting tools.

- **DevOps & Reliability:**
  - Deployed robust CI/CD pipelines using GitHub Actions, Docker, and Terraform, supporting daily deployments across Development, QA, and Production environments.
  - Configured Grafana and Prometheus monitoring to track API latency and reliability, ensuring resilient service delivery.
- **Testing & Quality Assurance:**
  - Created over 200 JUnit, Mockito, and Karate tests to validate complex business workflows, significantly reducing the QA cycle time.

Environment: Java, Spring Boot, Spring Cloud, React.js, TypeScript, AWS (RDS, S3, DynamoDB), Azure Cognitive Services, GitHub Actions, Docker, Terraform, PostgreSQL, Grafana, Prometheus.

Tata Consultancy Services (TCS) | *Hyderabad, India*

Role: Lead Software Engineer

Duration: Oct 2021 – Dec 2023

Project: Smart Appointment Optimization for Diagnostic Labs This project focused on building a cloud-integrated scheduling and analytics engine for diagnostic labs. The system optimized appointment slots based on equipment availability, technician workloads, and patient traffic, ultimately improving lab throughput and reducing patient wait times.

Key Responsibilities & Achievements:

- **Core System Development & Logic:**
  - Developed core backend logic using Java and Spring Boot to manage complex scheduling rules and real-time slot updates across multiple lab locations.
  - Designed and implemented an intelligent appointment optimization engine that improved scheduling efficiency by 40%.
  - Created RESTful APIs for front desk staff and patient portal integration, enabling seamless appointment booking and rescheduling.
- **Cloud Architecture & Performance:**
  - Configured Google Cloud Pub/Sub to handle appointment events asynchronously, minimizing processing delays during high-traffic periods.
  - Utilized Cloud SQL (MySQL) to manage lab data and user records, implementing indexed queries and stored procedures for performance tuning.

- Developed caching strategies using in-memory stores to minimize API response times for frequently accessed endpoints.

- **AI Integration & Innovation:**
  - Integrated GenAI APIs to proactively notify users with GPT-crafted alerts regarding rescheduling and availability changes.
- **Team Leadership & Process:**
  - Collaborated across cross-functional teams to deploy resilient microservices aligned with HIPAA compliance standards.
  - Participated in architecture discussions to define service boundaries and modular layering for better maintainability.
  - Assisted with the onboarding of new developers by thoroughly documenting service contracts, environment setup, and development workflows.

Environment: Java, Spring Boot, MySQL (Cloud SQL), Google Cloud Platform (GCP), Google Pub/Sub, RESTful APIs, JWT, JUnit, Mockito, Agile (Scrum).

Infobell IT | *India*

Role: Software Engineer

Duration: Dec 2019 – Aug 2021

Project: Claims Pre-Authorization Workflow Automation I developed a workflow-driven backend system for a healthcare payer to automate and validate healthcare claim pre-authorizations. The solution utilized payer policy rules, provider network agreements, and patient eligibility data to reduce manual effort and improve approval turnaround times.

Key Responsibilities & Achievements:

- **Workflow Automation & Microservices:**
  - Built microservices using Java and Spring Boot to manage pre-authorization rule evaluations and dynamic case routing.
  - Automated healthcare claim workflows using Spring Boot and GCP, implementing retry mechanisms and queuing using Pub/Sub to ensure message durability.
  - Leveraged Google Cloud Functions to trigger background checks and validations on claim intake events.
- **AI & Data Enrichment:**
  - Leveraged an internal GenAI (LLM) setup for auto-classifying and enriching claim data, streamlining the decision-making process.
- **Integration & Monitoring:**
  - Coordinated with frontend developers to align API responses with dynamic authorization form flows.

- Used service logs and Cloud Monitoring to troubleshoot issues and measure service performance indicators.

Environment: Java, Spring Boot, Google Cloud Platform (GCP), Cloud Functions, Firestore, Pub/Sub, RESTful APIs, OAuth2, JUnit, Mockito.

Wipro | *Hyderabad, India*

Role: Software Engineer Intern

Duration: Jan 2018 – Nov 2019

Project: Employee Onboarding and IT Asset Tracking Portal I supported the development of an internal portal designed to streamline onboarding workflows and track IT asset allocations across departments, integrating HR and infrastructure teams into a seamless platform.

Key Responsibilities & Achievements:

- **Full Stack Support:**
  - Assisted in building web services using Java and Spring Boot to manage user registration, approvals, and notifications.
  - Contributed to the Spring Boot backend and React.js frontend, fixing minor UI bugs and improving form behaviors.
- **Cloud Deployment:**
  - Learned to deploy backend components using Azure App Service and helped configure Azure SQL Database to store employee profiles and asset logs.
- **Documentation & Testing:**
  - Documented configuration steps, API responses, and user roles in Confluence for internal use.
  - Created test data and conducted form validation checks in coordination with the QA team.

Environment: Java, Spring Boot, Azure App Service, Azure SQL Database, REST APIs, HTML, CSS, JavaScript, JUnit.

EDUCATION

Master of Science in Computer Science University of Illinois Springfield | *May 2025*