**Praneeth R**
**Java Full Stack Developer**
**Nag698586@gmail.com**
**+1 (210) 255-3362**
**nag698586@gmail.com**
**LinkedIn | Github | Portfolio**
**Saint Louis, MO**

## Professional Summary:

- Highly skilled **Java Full Stack Developer** with 6 years of progressive experience architecting, developing, and deploying **secure, scalable, and maintainable applications** across **healthcare, banking** domains, leveraging both **cloud-native** and **microservices architectures**.
- Expert in building end-to-end enterprise applications using **Java 11+**, **Spring Boot**, **Spring Cloud**, **Hibernate**, and **RESTful APIs**, with robust **back-end logic** and fault-tolerant design to handle millions of transactions securely and efficiently.
- Hands-on experience in developing **responsive and dynamic front-end interfaces** using **React.js**, **Angular**, and **Next.js**, ensuring seamless user experiences across browsers and devices, while integrating **Redux**, **Axios**, and **Formik** for efficient state and form management.
- Adept in designing and deploying **cloud-first applications** using **AWS (EC2, Lambda, S3, CloudWatch, API Gateway)** and **Azure (App Services, Blob Storage, Azure Functions, Azure DevOps)**, applying **CI/CD**, **IaC**, and cost-optimized resource provisioning.
- Delivered **HIPAA-compliant healthcare platforms**, integrating **EHR systems**, **FHIR/HL7 standards**, **patient engagement portals**, and **claims processing microservices**, ensuring interoperability, scalability, and compliance with federal data privacy mandates.
- Built and optimized **real-time banking applications**, including **payment gateways**, **KYC validation services**, **transaction audit modules**, and **fraud detection APIs**, using **Kafka**, **OAuth2**, and **JWT-based authentication**, supporting massive daily data volumes and transaction consistency.
- Developed and deployed **containerized services** using **Docker**, orchestrated using **Kubernetes (EKS/AKS)**, with **Helm charts** for deployment configuration and **Terraform** for infrastructure provisioning in multi-environment setups.
- Strong expertise in designing **data models** and optimized queries for **PostgreSQL**, **MongoDB**, and **MySQL**, with performance-tuned indexes, stored procedures, and real-time aggregation pipelines for analytics and reporting modules.
- Implemented **microservices communication** using **Feign Clients**, **Eureka Discovery**, and **Spring Cloud Gateway**, with built-in resilience via **Hystrix** and **Resilience4j**, enhancing service availability and error recovery mechanisms.
- Developed high-performance **APIs** following **REST** and **GraphQL** principles, with proper documentation via **Swagger/OpenAPI**, and built automated test collections in **Postman** and **Newman** for QA and integration teams.
- Automated **CI/CD pipelines** using **Jenkins**, **Azure Pipelines**, and **GitHub Actions**, integrating static code analysis tools like **SonarQube**, artifact repositories like **JFrog Artifactory**, and secret management with **HashiCorp Vault**.
- Developed **event-driven systems** using **Azure Event Hubs**, **Kafka Streams**, and **AWS SNS/SQS**, facilitating asynchronous communication and decoupling between microservices for improved fault tolerance.
- Integrated **Okta**, **Azure AD**, and custom **RBAC** for authentication/authorization in both web apps and API layers, supporting **SAML** and **OpenID Connect** protocols for secure enterprise-grade access.
- Created **interactive admin portals** and **reporting interfaces** using **React**, **Tailwind CSS**, **Chart.js**, and **Power BI Embedded**, allowing product owners to visualize usage trends, system health, and customer behavior metrics.
- Built automated **test suites** using **JUnit**, **Mockito**, **Selenium**, **Cypress**, and **Jest**, supporting full lifecycle testing including **unit, integration, regression, and end-to-end UI testing** within **CI/CD pipelines**.
- Refactored **legacy monolith systems** into **modular microservices**, applying **domain-driven design (DDD)**, building **bounded contexts**, and aligning services with business domains for modularity and agility.
- Leveraged **Elastic Stack (ELK)**, **Datadog**, and **Prometheus/Grafana** for **log aggregation, performance monitoring, and alerting**, enabling **root cause analysis** and **proactive incident response** in production environments.
- Enabled **real-time fraud monitoring dashboards** and **financial summaries** for **banking clients** by integrating streaming data into **Power BI**, **Looker**, and **Grafana** using **REST** and **WebSocket APIs**.
- Participated in **Agile/Scrum ceremonies** including **sprint planning, daily standups, retrospectives, and demos**, maintaining detailed technical documentation in **Confluence**, tracking issues in **Jira**, and collaborating via **Slack/MS Teams**.
- Strong **communication, stakeholder management, and cross-functional collaboration skills**, often acting as the **bridge between engineering, product, and QA teams**, while mentoring **junior developers** on best practices, code reviews, and design patterns.

**PROFESSIONAL EXPERIENCE:**

**Centene Corporation, Saint Louis, United States** **Jan 2025 – Present**
**Role:** Java Full Stack Developer

**Functional Role Details:**

- Led the end-to-end development of a cloud-based **Eligibility and Claims Adjudication Portal** for **Medicaid** and **Marketplace** plans, delivering scalable **microservices architecture** using **Java 17**, **Spring Boot**, **AWS EKS**, and **React.js**, aligned with **NCQA** quality standards and **payer-provider data exchange** needs.
- Engineered **FHIR-compliant APIs** for real-time access to **patient demographics, encounters, and medication history** by integrating with external **EHR systems** like **Epic** and **Cerner**, using **OAuth2.0**, **OpenID Connect**, and **JWT-based authorization**, ensuring **HIPAA** and **ONC 21st Century Cures Act** compliance.
- Built and containerized **backend services** in **Spring Boot** with **Docker**, orchestrated via **AWS EKS** using **Helm charts**, with **Terraform** scripts provisioning scalable infrastructure across **dev, staging, and prod environments**.
- Designed and implemented **async workflows** using **AWS Lambda** and **Step Functions** to process **bulk provider claims**, automate **EOB generation**, and trigger **audit queues**, reducing latency and offloading compute from synchronous APIs.
- Developed **modular front-end components** using **React.js**, **Redux Toolkit**, and **Tailwind CSS** to build **reusable UI** for **member onboarding, plan comparison, digital ID cards, and prior authorization submission**, optimized for **cross-device usability**.
- Modeled complex entities including **members, dependents, claims, PCP networks, formulary tiers, and coverage exceptions** using **PostgreSQL**, leveraging **JPA, entity relationships, and native queries** to support **high-volume transactional access**.
- Implemented **Spring Cloud Gateway**, **Eureka Discovery**, and **Hystrix fallback** patterns to enable **fault-tolerant API aggregation**, while securing microservices via **Okta SSO**, enforcing **multi-tenant RBAC policies** across business lines.
- Created **Kafka-based event pipelines** for handling **real-time claim updates, PCP changes, and pharmacy benefit changes**; built consumers with **Spring Kafka** to persist logs for **compliance auditing** and notify members via **SMS/email**.
- Integrated **AWS S3** to store **pre-auth documents, referrals, and ID verification files**, applying **KMS encryption**, **bucket policies**, and **versioning**, and linking metadata to **PostgreSQL** for **searchable, secure document access**.
- Collaborated with product teams and **care management SMEs** to translate **HEDIS** and **STAR rating metrics** into technical requirements, exposing backend logic as **microservices** and front-end visualizations using **Recharts** and **Chart.js**.
- Built **CI/CD pipelines** using **GitHub Actions** and **AWS CodePipeline** to automate builds, **unit testing**, **artifact uploads** to **ECR**, and **rolling deployments** on **EKS**, with integrated **SonarQube** for static code analysis and coverage reports.
- Integrated **HL7 v2.x feed processing** using **Apache Camel** for older **EHRs** that lacked **FHIR endpoints**, transforming messages into **FHIR bundles** before storage in the **centralized data lake** for analytics.
- Implemented **API performance monitoring** using **CloudWatch**, **Prometheus**, and **Grafana dashboards**, creating **service-level alerts** for high-latency or error-prone endpoints, reducing **incident response times** during peak periods.
- Authored **Swagger/OpenAPI** specs and contributed to **cross-team documentation** in **Confluence**, covering **API payload schemas, backend service design, request-response mapping, error codes**, and **healthcare interoperability** best practices.
- Performed **unit tests** using **JUnit 5** and **Mockito**, created **Postman integration test collections**, and participated in weekly **regression triages** with the QA team using **Zephyr** integrated into **Jira**, ensuring **defect closure** within sprint cycles.

**TCS, Hyderabad, India** **Jan 2020 – July 2023**
**Role:** Java Full Stack Developer

**Functional Role Details:**

- Played a key role in modernizing the **Commercial Loan Origination platform** by transforming a **legacy monolithic system** into a **cloud-native microservices architecture**, enabling **modular deployment**, **fault tolerance**, and improved **scalability** for high-volume lending operations.
- Designed and developed **stateless REST APIs** using **Spring Boot (Java 11)**, layered with **Spring Security**, **OAuth2**, and **JWT**, to support **loan prequalification, borrower onboarding, KYC/AML verification, and credit scoring services** across multiple origination channels.
- Engineered secure, **asynchronous communication** between modules using **Azure Service Bus Topics/Queues**, ensuring **decoupled event handling** for workflows such as **loan application intake, collateral appraisal updates, and risk review escalations**.
- Created **responsive and modular frontend components** in **Angular 12**, implementing **reactive programming with RxJS** to handle **real-time status updates** of underwriting approvals, loan conditions, and document submissions, improving underwriter efficiency.
- Integrated with **enterprise core banking systems** including **Loan IQ, nCino, and internal CRM tools** through **REST/SOAP web services**, enabling seamless flow of **borrower financial data, credit reports, and legal entity hierarchy** into the origination portal.

- Designed **normalized and denormalized data models** in **SQL Server** and **Azure SQL Database**, supporting critical entities such as **loan agreements, repayment schedules, financial statements, and covenant packages**, ensuring compliance with **Basel III, CCAR, and DFAST reporting**.
- Configured **Azure API Management** and **Application Gateway** to expose **internal APIs** to authorized front-end consumers, enabling **load balancing, traffic routing, and versioning** without disrupting production services.
- Built **dynamic form generation modules** in **Angular** for loan document intake, integrating **file uploads** with **Azure Blob Storage** and validating documents using embedded **OCR and metadata extraction services**.
- Employed **Azure Active Directory B2C** and **RBAC policies** to implement **fine-grained user-level access control**, supporting **multi-role access patterns** across **business users, credit analysts, auditors, and compliance officers**.
- Orchestrated **CI/CD pipelines** using **Azure DevOps**, integrating **Docker containers**, **SonarQube** for static code analysis, and **JUnit/Mockito test stages** to ensure **security compliance** and deployment readiness across **UAT, QA, and production** tiers.
- Collaborated with the **Enterprise Data Team** to deliver structured **loan datasets** to **Azure Synapse** and **Power BI dashboards**, supporting **pipeline health, segment exposure, collateral trends, and origination SLA adherence**.
- Integrated **Azure Key Vault** for **credential rotation, certificate storage, and secret injection** into pipelines and runtime environments, ensuring **application security best practices** and reducing exposure risks.
- Enabled **traceability and audit readiness** by implementing **OpenTelemetry tracing** across **Spring Boot services** and visualizing distributed traces using **Azure Monitor** and **App Insights** to diagnose bottlenecks in real time.
- Supported the **Risk Management team** in modeling **credit exposure metrics (PD, LGD, EAD)** by delivering enriched data views for downstream use in **FRTB, Y-14M, and LCR/NSFR stress testing**.
- Participated in **Sprint Planning, Backlog Grooming, and Cross-functional Design Reviews** using **Jira and Confluence**, providing **technical feasibility feedback** and aligning with **regulatory and domain-specific banking needs**.
- Led **peer code reviews**, enforced **TDD practices**, and participated in **refactoring efforts** for **legacy business logic**, improving **maintainability, code coverage**, and adherence to **clean architecture principles**.
- Developed and maintained **API contracts** using **Swagger/OpenAPI documentation**, streamlining collaboration with **frontend developers** and **QA automation engineers**, accelerating sprint velocity through **reusable mock servers**.
- Enabled detailed **real-time operational analytics** for **auditors and senior leadership** by exposing **materialized reporting views** for **loan pipeline status, exception handling (fraud flags, documentation gaps), and compliance audit triggers**.
- Conducted **impact analysis** and **remediation** of changes to underlying **credit rules** and **regulatory thresholds**, coordinating with **Risk, Audit, and Compliance stakeholders** to validate configurations in pre-production before go-live.
- Played a central role in the bank's **cloud transformation roadmap** by implementing **containerized deployments** on **AKS (Azure Kubernetes Service)**, improving **deployment frequency** and reducing **rollback risks** across critical services.

**Birlasoft, Hyderabad, India** **Nov 2017 – July 2018**
**Role**: Java Full Stack Developer Intern

**Functional Role Details:**

- Designed and implemented core modules of a care coordination portal using Java 11, Spring Boot, and Hibernate, enabling clinical staff to manage patient referrals, follow-up schedules, and care episodes across facilities.
- Built intuitive front-end interfaces using Angular 11, RxJS, and NGXS, supporting real-time data binding for patient appointment calendars, lab result updates, and provider-to-provider messaging.
- Developed secure RESTful APIs for integration with internal EMR/EHR systems (e.g., Epic, Cerner) to pull patient vitals, historical records, medication history, and lab data into a unified clinician dashboard.
- Implemented custom modules to ingest and reconcile claims data from payer systems like Facets and QNXT, validating CPT/ICD-10 codes, identifying overpayments, and reconciling discrepancies with remittance advice files.
- Enabled single-click prior authorization workflows by integrating with provider systems and payer APIs, reducing manual processing delays for high-volume procedures.
- Built reusable UI widgets for medical case timelines, lab charts, and referral histories using Angular Material, improving clinician productivity and reducing UI complexity.
- Engineered batch jobs using Spring Batch to automate daily reconciliation of submitted vs. accepted claims, identifying rejection patterns and improving clean claim rate.
- Used Apache Camel for routing HL7/FHIR messages between subsystems, mapping patient encounters and eligibility data across various EMR formats while ensuring standardization.
- Optimized data persistence using PostgreSQL and Redis for caching provider directory lookups and appointment metadata, improving system responsiveness.
- Collaborated with the Pharmacy Benefit Management (PBM) team to integrate formulary lookups, patient-specific drug coverage insights, and real-time Rx eligibility checks within the prescribing UI.
- Implemented Kafka consumers to subscribe to patient discharge events and notify care teams in real time, triggering follow-up care plans and post-acute visit scheduling.

- Maintained **FHIR-compliant JSON APIs** and coordinated with **external developers** to support **payer-provider data exchange initiatives** aligned with **CMS Interoperability mandates**.
- Created and tested **integration logic** for **external imaging systems (PACS)**, linking **radiology records** and displaying **image metadata** through **REST calls** in the **patient view page**.
- Managed **CI/CD** using **Bitbucket Pipelines**, **Docker**, and **Kubernetes**, building **isolated deployment branches** for **QA/UAT**, reducing **environment bugs** during releases.
- Wrote **unit, integration, and E2E tests** using **JUnit**, **Mockito**, **Protractor**, and **Karma**, maintaining **85%+ code coverage** and ensuring **quality in medical data processing**.
- Participated in **design reviews** and **Agile ceremonies**, collaborating with **product managers** and **clinical SMEs** to ensure workflows like **medication reconciliation** and **discharge planning** met **regulatory compliance** and **usability standards**.

**EDUCATION:**

- MS in Computer Science from University of Central Missouri

**CERTIFICATIONS:**

- AWS Certified Developer - Associate (DVA-C02) | Amazon Web Services
- Microsoft Certified: Azure Developer Associate (AZ-204) | Microsoft

**PUBLICATION:**

**Title**: Development and Performance Evaluation of NavIC-Based Reefer Monitoring System
**Authors:** N. Praneeth Reddy, B. Sumanth Reddy, A. Supraja Reddy, K. Satyanarayana, V. Dileep Reddy
**Published In**: Advances in Signal Processing and Communication Engineering, Springer, July 2024
**Abstract**: Proposed a NavIC-based monitoring system to ensure real-time tracking of environmental conditions in refrigerated containers (reefers) for transporting temperature-sensitive goods. The system leverages NavIC for precise geolocation, enhancing logistics efficiency and reducing spoilage losses.
**Link**: https://link.springer.com/chapter/10.1007/978-981-97-0562-7_15