Sri Charan Byreddy
Software Engineer

+1 (716) 709- 1593 | cbyreddy93@gmail.com | Florida, USA | LinkedIn | Portfolio | GitHub

SUMMARY

Experienced Software Engineer with 4+ years of experience designing, developing, and optimizing scalable applications across backend, frontend, and cloud environments. Skilled in Java, Spring Boot, Node.js, React, AWS, Docker, Kubernetes, and SQL/NoSQL databases, with a strong track record of building secure, high-performance systems and integrating AI/ML solutions into enterprise platforms. Adept at collaborating with cross-functional teams, applying CI/CD practices, testing frameworks, and security protocols to deliver reliable and compliant software solutions. Recognized for problem-solving, teamwork, and delivering business-driven technology outcomes.

SKILLS

Programming & Backend: Java, Node.js, Spring Boot, Spring MVC, REST APIs, SOAP APIs, Microservices, Asynchronous Processing, Hibernate ORM, CompletableFuture

Frontend & UI: React, Next.js, Redux, Tailwind CSS, Dynamic Rendering, Component Optimization

Databases & Storage: PostgreSQL, MongoDB, Redis, SQL Optimization, Database Design, NoSQL Data Modeling, Caching Strategies

Cloud & DevOps: AWS (EC2, S3, Lambda, RDS), Docker, Kubernetes, Jenkins CI/CD, Containerization, Cloud Deployment, Serverless Architecture

Data & Analytics: Apache Kafka, Spark, Spring Batch, Data Pipelines, Real-Time Streaming, Analytics Dashboards, ML Integration

Security & Compliance: Spring Security, JWT, OAuth2, AES Encryption, HIPAA Compliance, Role-Based Access Control (RBAC)

Testing & Quality Assurance: JUnit, Mockito, Selenium, Cypress, Automated Unit & Integration Testing, Load Testing, Regression Testing

AI & Machine Learning: Gen AI, XGBoost, LightGBM, MLflow, DVC, LangChain, FAISS, Predictive Recommendations, RAG Search

EXPERIENCE

CVS Health, USA   Jul 2024 – Present
Software Engineer

- Engineered secure and scalable microservices using Java and Spring Boot, integrating 5+ healthcare systems into cloud-based platforms on AWS, enabling real-time access for 10,000+ patient records and improving system efficiency by 40%.
- Designed and optimized PostgreSQL and MongoDB databases for patient records, prescriptions, and clinical encounters, implementing caching strategies that reduced data retrieval latency by 30% while maintaining HIPAA-compliant data security.
- Developed interactive React and Next.js user interfaces and dashboards with Tailwind CSS, allowing 500+ healthcare providers and patients to track prescriptions, schedule appointments, and monitor clinical outcomes, increasing user engagement by 35%.
- Built real-time data pipelines using Apache Kafka and Spark, integrating machine learning models via Python for predictive analytics on medication adherence and chronic disease management, improving predictive accuracy by 25%.
- Implemented CI/CD pipelines with Jenkins and GitHub Actions, automated testing with JUnit, Mockito, and Selenium, and deployed containerized applications using Docker and Kubernetes, reducing deployment time by 50% and maintaining 99.9% uptime.
- Applied Gen AI techniques to enhance backend logic and provide intelligent recommendations, improving patient guidance, system responsiveness, and operational efficiency by 20%.
- Monitored application performance, logging, and error tracking using Prometheus and Grafana, optimizing microservices orchestration and DevOps workflows to reduce operational bottlenecks by 30% and improve system reliability.

Rubixe AI, India   Sep 2022 – Jul 2023
Full Stack Developer

- Revamped React frontend components, implementing dynamic rendering, caching, and lazy loading, boosting navigation speed by 30%+ and enhancing experience for 5,000+ monthly active users, using React, Redux, and Tailwind CSS.
- Architected backend commerce services with Node.js and event-driven processing, optimizing asynchronous workflows to reduce request latency by 20%+ while maintaining stability for 10,000+ daily transactions.
- Implemented secure payment integrations using JWT and Razorpay APIs, orchestrating retry and backoff mechanisms to increase transaction completion rates by 15% and reduce checkout drop-offs across web and mobile platforms.
- Reconstructed PostgreSQL schemas and analytics pipelines, optimizing indexes and partitioning strategies to accelerate query performance by 30%+, supporting real-time campaign dashboards and reducing data processing lag.
- Orchestrated Docker containerized microservices and automated deployments using Kubernetes and Jenkins CI/CD, halving release cycles, enabling zero-downtime updates, and scaling deployment frequency for rapid product iterations.
- Deployed AI-powered search and recommendation engines with LangChain, FAISS, XGBoost, and LightGBM, improving product discovery, increasing session engagement by 25%, and driving measurable increases in conversions.
- Monitored and optimized application performance with AWS cloud services, Redis caching, and DevOps tools, ensuring high availability, scalability, and maintainability while improving system reliability by 30%.

Hexaware Technologies, India   Jul 2020 –Jul 2022
Software Engineer - Backend

- Engineered secure backend microservices using Java, Spring Boot, and Spring MVC, integrating 5+ healthcare systems for real-time patient record exchange, improving interoperability and operational efficiency across 50+ hospitals and pharmacies.
- Designed and optimized relational and NoSQL databases with PostgreSQL and MongoDB, implementing caching strategies and asynchronous workflows that enhanced data retrieval speed by 40%+ and supported real-time analytics dashboards for clinical and pharmacy operations.
- Developed RESTful and SOAP APIs compliant with FHIR/HL7 standards, enabling seamless and secure data exchange between hospitals, pharmacies, and EHR platforms, while maintaining HIPAA-compliant access control with Spring Security, JWT, and OAuth2.
- Orchestrated containerized deployments using Docker and Kubernetes on AWS cloud, ensuring scalable, fault-tolerant microservices that reduced downtime by 30% and improved availability for multiple healthcare clients.
- Built asynchronous messaging workflows and batch processing jobs with Apache Kafka and Spring Batch, enabling timely prescription notifications, adherence tracking, and historical data migration, increasing system reliability by 25% and operational insights for clinicians.
- Monitored application performance and system health with Prometheus, Grafana, and ELK Stack, proactively resolving errors, optimizing backend throughput, and maintaining 99.9% uptime under peak loads.
- Implemented intelligent caching and performance optimizations with Redis and Hibernate ORM, reducing repeated database hits and improving API response times by over 40%, enhancing clinician and pharmacy workflows across the platform.

EDUCATION

Master of Science in Engineering Science Data Science
University at Buffalo, State University of New York, Buffalo, NY