

# Banudeep Reddy Gade

SOFTWARE DEVELOPER

VA, USA | Mobile: (551) 465-6500 | [gbanudepreddy@gmail.com](mailto:gbanudepreddy@gmail.com) | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

## SUMMARY

Software Developer with 4+ years of experience building Java/Spring Boot microservices and React frontends for banking and healthcare. Design and ship event-driven, cloud-native systems on AWS that handle high-volume transactions, improve fraud detection, and raise reliability with strong observability and CI/CD, including real-time voice agents and AI agents for conversational and analytics use cases.

## EDUCATION

### George Mason University

*Master of Science in Computer Science*

Fairfax, VA, USA

Aug 2023 – May 2025

### Visvesvaraya National Institute of Technology

*Bachelor of Technology in Computer Science Engineering*

Nagpur, India

Jul 2018 – Apr 2022

## TECHNICAL SKILLS

**Languages:** Java, JavaScript, TypeScript, SQL, Python

**Backend:** Spring Boot, FastAPI, Node.js, Spring MVC, Spring Security, Microservices, REST APIs, Apache Kafka

**Frontend:** React.js, Redux, React Hooks, HTML5, CSS3, Bootstrap, Tailwind

**GenAI & LLMs:** Prompt engineering, LangChain, LangGraph, RAG, MCP, vector search (Pinecone, Chroma), AI/voice agents

**AI/ML & Data:** TensorFlow, PyTorch, scikit-learn, Pandas, NumPy, feature engineering, model evaluation/tuning

**Databases:** MySQL, PostgreSQL, MongoDB

**Cloud/DevOps:** AWS (ECS/EKS, Lambda, S3, API Gateway, CloudWatch), Jenkins, Docker, Maven, Gradle

**Testing/Quality:** JUnit, Mockito, Selenium, Postman, Swagger/OpenAPI

**Tools & Process:** Git/GitHub, Jira, Agile/Scrum, SDLC, Linux/Windows

**Certifications:** AWS Certified Developer – Associate, AWS Certified AI Practitioner, Google Cloud Associate Cloud Engineer

## EXPERIENCE

### Software Developer

*Wells Fargo*

Aug 2024 – Present

VA, USA

- Owned banking features end-to-end by partnering with product owners and building Java/Spring Boot microservices with Kafka pipelines, cutting average transaction latency by ~25% and stabilizing high-volume digital workflows against SLA breaches.
- Delivered responsive React.js + Redux dashboards for transaction monitoring and analytics, used by 30+ risk and operations users to track 15+ KPIs with real-time visibility into anomalies and SLA breaches.
- Strengthened fraud detection by wiring Python/Pandas-based anomaly checks into the data pipeline, computing risk features that reduced noisy alerts by ~15% and helped compliance teams review suspicious activity ~20% faster.
- Restructured schemas and tuned MySQL queries for payment settlements, increasing throughput and availability by ~40% for critical transaction flows.
- Designed and deployed AWS architectures with API Gateway, ECS/EKS, and Lambda to securely handle millions of transactions per day, adding CloudWatch dashboards and alerts to surface bottlenecks and reduce time-to-detect for production issues.
- Improved release quality and speed by expanding JUnit-based regression coverage and standardizing CI/CD via GitHub workflows, cutting manual effort and stabilizing regulated release cycles.

### Software Developer

*Capgemini*

Sep 2020 – Jul 2023

India

- Developed Spring Boot services with Spring Security to enforce HIPAA-compliant authentication and authorization for core healthcare platforms, safeguarding access to records for 50k+ patients across multiple clinics.
- Built React healthcare portals with Redux and Hooks, enabling clinicians and patients to access dashboards, appointments, and records through responsive, accessible UIs.
- Created TensorFlow-based predictive models on tens of thousands of patient records to flag early disease-risk patterns, improving identification of at-risk cases by ~20% and giving clinical teams earlier decision support for interventions.
- Optimized PostgreSQL performance for high-traffic workflows by refining queries, indexes, and connection pooling, reducing p95 query latency by ~60% and improving responsiveness during peak usage windows.
- Containerized services with Docker and automated Jenkins pipelines with Postman/OpenAPI checks, reducing release-related incidents by ~30% and improving interoperability with third-party healthcare systems.

## PROJECTS

### Modular Voice Agent – Cascading STT → LLM → TTS Pipeline

[GitHub](#)

- Built a web-based voice assistant with a cascading STT → LLM → TTS pipeline at 16kHz, using AudioWorklet and WebSockets to support real-time conversations with live transcription and mid-response interruption (barge-in).
- Designed a provider-agnostic architecture that mixes Deepgram/Azure Speech for STT/TTS with OpenAI GPT-4 / Azure OpenAI for LLM processing, wired through a Python `aiohttp` backend and configurable via environment variables and system prompts.
- Containerized the service with Docker and deployed to Azure Container Apps on a single 8080 port for HTTP/WebSocket traffic, adding connection management, error handling, optional audio recording, and health checks for production-ready reliability.