

RAHUL MANJUNATH PUDURKAR

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SUMMARY

Full-stack Software Engineer with 5+ years of experience building scalable applications and data-driven platforms across finance, logistics, and healthcare. Hands-on in **Java Spring Boot**, **Python (FastAPI, PySpark)**, **React/TypeScript**, **SQL/NoSQL (Oracle, MongoDB, MySQL)**, and cloud deployment on **AWS (EC2, S3, Glue, Redshift)** with CI/CD pipelines (Jenkins, GitHub Actions, Docker, Kubernetes). Delivered measurable outcomes including **preventing \$6.5M in misclassified exposures** through GenAI pipelines and reducing API latencies by 40%+ in production systems. Skilled in **LLM integration, RAG architectures, anomaly detection models, and end-to-end service development**, blending backend reliability with modern AI/ML capabilities.

EXPERIENCE

JPMORGAN CHASE

Software Development Engineer - AI/ML & GenAI Platforms

Jan 2025 - Current

New York, NY

- Engineered **Python FastAPI services** to serve LLM-powered document insights for contracts and compliance records, reducing manual analyst review time by 40%.
- Designed ingestion pipelines in **PySpark + AWS Glue**, transforming millions of financial documents into structured, tokenized datasets for model training and retrieval workflows.
- Implemented **OCR + OpenCV preprocessing** on scanned contracts and invoices, enabling DocLLM to capture tables, signatures, and annotations with 25% higher accuracy.
- Deployed a **retrieval-augmented generation (RAG) pipeline** with LangChain + FAISS on AWS, cutting document lookup time from hours to minutes and improving retrieval precision by 35%.
- Partnered with data scientists to fine-tune **transformer and DocLLM models** on synthetic + historical trade data, boosting clause extraction F1 scores by 20% and preventing \$6.5M in potential misclassified exposures.
- Automated training and deployment cycles with **Airflow + MLflow**, adding lineage tracking and CloudWatch alerts; reduced model release cycles from weeks to days.

CLUTCH DELIVERY LLC

Dec 2023 - Aug 2024

Software Engineer - Syracuse University CASE Co-op Program

Syracuse, NY

- Re-architected legacy **Node.js/Express APIs** into containerized microservices on **Docker + Kubernetes**, improving scalability and cutting response latency by 40%.
- Built a hybrid storage layer with **PostgreSQL + Amazon RDS + MongoDB**, enabling seamless handling of structured and unstructured research datasets with 99.9% uptime.
- Automated deployment pipelines using **GitHub Actions + Jenkins**, reducing release cycles by 60% and ensuring reproducible builds for production workloads.
- Enhanced frontend integration with **TypeScript + WebSockets**, improving data synchronization speed and boosting user engagement by 30%.

DURE TECHNOLOGIES

Apr 2021 - Jun 2023

Software Engineer - iMonitorPlus- Financial Data Platform

Mumbai, India

- Developed backend services in **Java Spring Boot** with RESTful APIs, handling real-time data collection from 35+ countries; scaled platform usage by 40% without downtime.
- Optimized database queries in **MySQL + Hibernate**, improving transaction processing speed by 55% and cutting API response times under 200ms for critical workflows.
- Built frontend interfaces in **ReactJS + JavaScript**, enabling health workers to capture and visualize field data; increased adoption among 5K+ active users.
- Integrated **Firebase Realtime Database** for push notifications and live updates, ensuring secure and scalable communication between mobile clients and backend services.
- Enhanced system reliability by adding **Spring Security, JPA caching, and AWS EC2 + S3 deployment pipelines**, reducing app size by 70% and boosting mobile performance on low-end devices.

SPACE INFOLAB

Jan 2020 - Mar 2021

Java Developer - Loan & Customer Onboarding Platform

Remote, India

- Developed backend microservices in **Java Spring Boot**, exposing REST APIs for loan and customer onboarding workflows; scaled to handle 80K+ daily requests with less than 300ms latency.
- Designed hybrid storage with **Oracle DB for transactions** and **MongoDB for customer activity logs**, enabling faster lookups and reducing query response times by 45%.
- Implemented **multithreading and JMS queues** to process payment events in parallel, improving throughput and reducing dropped transactions by 35% during peak loads.
- Automated CI/CD pipelines using **Maven + Jenkins**, deploying to on-prem servers and **AWS EC2**, cutting release cycles from two months to weekly rollouts without downtime.

SKILLS

Programming & Backend: Java (Spring Boot, REST APIs, Microservices, JMS, gRPC, Protocol Buffers), Python (FastAPI, PySpark, Pandas, NumPy, Scikit-learn, PyTorch, and XGBoost), Node.js, Express.js

Frontend Development: React.js, TypeScript, Next.js, Redux, GraphQL, WebSockets, Material UI, Responsive UI Design

Cloud Computing & DevOps: AWS (EC2, S3, Lambda, SageMaker, Bedrock, Glue, Auto Scaling, CloudWatch), Azure, Docker, Kubernetes, Terraform, Jenkins, GitHub Actions, Airflow, Serverless Architecture, Infrastructure as Code,

Data Engineering & Databases: SQL (PostgreSQL, Oracle, MySQL, SQL Server), NoSQL (MongoDB, Firebase, Supabase, Vector DBs), ETL Workflows, Data Modeling, Data Lake Management, Apache Kafka, Data Governance

AI/ML & Analytics: NLP (spaCy, NLTK), Hugging Face Transformers, RAG Frameworks, LLM Development, Prompt Engineering, OpenAI API, OpenCV, FAISS, Feature Engineering, Anomaly Detection, Time Series Analysis, Statistical Analysis, A/B Testing, Model Deployment & Monitoring

EDUCATION

Syracuse University

May 2025

Master of Science in Computer Science

Syracuse, NY