Geetha Reddy Bommareddy
Senior ML Engineer | GenAI & MLOps

geethareddybommareddy1456@gmail.com
Linkedin
Portfolio
+1(470)-322-6858
Atlanta, Georgia

AI/ML Engineer with 4+ years of experience designing, deploying, and scaling production-grade machine learning and NLP systems in financial services and risk analytics. Expertise in fraud detection, real-time inference, feature engineering, MLOps, deep learning, LLM-powered (RAG) applications on cloud-native ML pipelines.

Core Skills
Machine Learning & GenAI: XGBoost, LightGBM, CatBoost, Scikit-learn, Gradient Boosting, Decision Trees, SVM, KNN, Time Series Forecasting (Prophet, ARIMA), LangChain, RAG (Retrieval-Augmented Generation), GPT, Hugging Face Transformers, spaCy, NLTK, BERT Engineering, Prompt Engineering, Vector Databases (Pinecone, FAISS)
Deep Leaning & AI Modeling: PyTorch Lightning, TensorFlow, CNNs, RNNs, LSTMs, Transformers
MLOps: MLflow, Docker, Kubernetes, CI/CD (GitHub Actions, Jenkins), Model Deployment & Monitoring
Cloud Platforms & Data Platforms: AWS (SageMaker, Lambda, EC2, S3, Glue), Azure ML, Databricks, Snowflake, ETL & ELT Pipeline, Airflow, SQL, NoSQL (MongoDB, DynamoDB), Tableau, Power BI, Plotly, Matplotlib, Seaborn, Dash, Advanced Excel
Programming & Development: Python, Pandas, NumPy, HTML, CSS, JavaScript, PyTorch, FastAPI, Flask, Git, GitHub
Certificates: AWS CERTIFIED DATA ENGINEER – ASSOCIATE

Work Experience

AI/ML Engineer   Jan 2024 - Present
JP Morgan Chase & Co. | *Atlanta, GA*
• Built and deployed real-time fraud and risk scoring models using XGBoost and PyTorch, processing 100K+ transactions/day and reducing inference latency from 9s to <3s.
• Developed streaming ML pipelines with PySpark, Kafka, and AWS, enabling continuous feature engineering and real-time alerting for fraud operations.
• Designed LLM-powered knowledge assistants using GPT, Hugging Face, FAISS and Retrieval-Augmented Generation (RAG) to summarize regulatory and investigation data, supporting fraud analysts and reducing research cycles to same-day turnaround.
• Productionized ML services using Docker, Kubernetes (EKS), and SageMaker, implementing model versioning, monitoring, and explainability (SHAP) in regulated environments.

Data Engineer - (ML & Analytics)   May 2020 - Jul 2022
LTIMindtree | *India*
• Developed anomaly detection and fraud models using Autoencoders and Isolation Forest, identifying 8,200 + suspicious events per quarter and improving regulatory compliance.
• Built NLP pipelines with Hugging Face and spaCy to classify and summarize customer compliants, cutting manual review time from 4 hrs to 30 mins
• Implemented Time-series forecasting models (LSTM, ARIMA, Prophet) to predict cashflows across 120+ accounts, improving liquidity planning accuracy.
• Automated ML pipelines and MLOps workflows using Databricks, MLflow, Docker and AWS reducing data preparation effort by 100+ hours/month.

Education
Master of Science in Information Systems – Trine University   Aug 2022- Dec 2023
(Relevant Coursework: Machine Learning, Deep Learning, Data Mining, Cloud Computing, Advanced Analytics)