## Sasi Boyapati

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- AI/ML Engineer with 3+ years of experience delivering enterprise-grade machine learning solutions in healthcare, insurance, and research. Skilled in LLMs, Generative AI, computer vision, and MLOps, with achievements including boosting model accuracy to 93%+, cutting deployment cycles from weeks to days, and driving multimillion-dollar cost savings through fraud prevention. Experienced in building cloud-native ML platforms (AWS, Databricks, Kubernetes), deploying production APIs, and scaling AI systems for business impact.
- Technical Skills: -

Programming Languages: Python, SQL, Java, R, TypeScript, JavaScript

ML/AI Frameworks & Libraries: PyTorch, TensorFlow, Keras, Scikit-learn, Hugging Face, LangChain, LlamaIndex, OpenCV ML / AI Techniques & Evaluation: RAG, LSTM, BERT, GPT, CNN/RNN, Word2Vec, GloVe, Anomaly Detection, Prompt Engineering, BLEU, ROUGE, METEOR

Cloud & DevOps: AWS (SageMaker, EC2, Bedrock, EKS), Docker, Kubernetes, Jenkins, CI/CD, Databricks, Azure

Databases & Data Engineering: PostgreSQL, Snowflake, MySQL, FAISS, ChromaDB, Pinecone, ETL Pipelines, Hadoop, Spark

Visualization & BI: Tableau, Power BI, Matplotlib, Pandas, NumPy

**Web & APIs:** FastAPI, Flask, Django, Spring Boot, Nest.js, RESTful APIs, WebSockets, React, Angular, OpenAl API **Development Methodologies:** Agile, Scrum, CRISP-DM, Prototyping

## **WORK EXPERIENCE**

# UnitedHealth Group Jan 2024 – Present

Al Engineer

- Built Al-driven claims adjudication platform with BERT, increasing claim accuracy +28% and reducing manual review effort -40%.
- Developed fraud detection pipeline using Gradient Boosting + anomaly detection, preventing \$3.2M+ fraud annually with 93% precision.
- Automated HIPAA-compliant MLOps workflows on AWS SageMaker & EKS, cutting model deployment cycles from 3 weeks → 5 days.
- Deployed OCR-based EHR ingestion with OpenCV + AWS Textract, achieving 99.5% accuracy and reducing latency -35%.
- Delivered predictive cost-forecasting models (+22% accuracy) and interactive Power BI dashboards for risk monitoring.

Intilt May 2021-May 2023

Al Engineer

- Introduced MSBeyond, an AI-enabled insurance platform managing 50K+ policies, automating end-to-end workflows.
- Enhanced claims automation using OCR + NLP models, reducing settlement cycles -38% and improving fraud detection accuracy to 92%.
- Delivered policy recommendation engine (XGBoost/Gradient Boosting), driving +20% cross-sell conversions.
- Designed microservices architecture with FastAPI + AWS ECS, scaling workloads with 99.9% uptime.
- Consolidated PostgreSQL data warehouse, reducing ETL latency -45%, and built real-time KPI dashboards for executives.

#### **PROJECTS**

## **Sign Language Conversion Application:**

- Developed a real-time CNN-LSTM translator achieving 98% accuracy on 50+ ASL signs, processing video at 25+ FPS.
- Integrated sign-to-text, 3D avatar rendering, and TTS modules, improving accessibility for 500+ users.

## **EquityResearchTool:**

- Automated financial data ingestion and analytics with Python + Yahoo Finance API, generating risk/return metrics (Volatility, Sharpe, Max Drawdown).
- Produced LLM-driven research reports with commentary + visualizations, exported as timestamped Markdown.

## **EDUCATION**

- Master of Science in Computer Science, Texas Tech University | GPA: 3.66/4.0 | 2023-2025
- Bachelor of Engineering in Computer Science and Engineering, Parul University, Gujarat | GPA: 3.25/4.0 | 2019-2023

## **CERTIFICATIONS**

- AWS Certified AI Practitioner, AWS, 2025
- Amazon Bedrock Getting Started with Generative AI, Coursera, 2025
- Master Generative AI: Professional level LLM application development, Euron, 2025
- Al Extern , **AT&T**,2024