

SURYA VENKATA ROHIT MOGANTI

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EDUCATION

State University of New York, Buffalo , Master's in Computer Science and Engineering	Jan 2024 - May 2025
Relevant Coursework: Deep/Reinforcement Learning, Computer Vision, MLOps, LLM Security	
GITAM University, Hyderabad, India , B. Tech in Computer Science and Engineering	Jun 2018 - May 2022
Relevant Coursework: Machine Learning, Algorithm Design, Web Development, Operating Systems	

SKILLS

Programming: Python, SQL, JAVA, Bash

Machine Learning & AI: PyTorch, Hugging Face, RAG, YOLOv8, Detectron

Cloud & DevOps: AWS, Snowflake, REST APIs, PySpark, Docker, Kafka, Kubernetes, Airflow

Additional: Experience with Agile Development, CI/CD pipelines (Git, GitHub Actions), Next.js, PostgreSQL, Cursor AI

PROFESSIONAL EXPERIENCE

Software Engineer

TEKsystems Global Services – Hyderabad, India Sept 2022 - Dec 2023

- Individually contributed to the end-to-end development of a scalable document ingestion pipeline using AWS Textract, Lambda, S3, SageMaker, and DynamoDB, improving document processing speed by 40% and boosting text extraction accuracy by 35% through feedback-based optimization.
- Integrated a human-in-the-loop system via API Gateway and SageMaker **endpoints**, allowing manual review and correction of extracted text, with metadata logging and routing stored in DynamoDB for audit and retraining.
- Enhanced a preexisting frontend in Next.js for human reviewers and orchestrated real-time ingestion workflows using S3 events, Lambda triggers, and CloudWatch monitoring, reducing system failure rates by 90% through Python-based fault tolerance and retry logic.

Software Engineering Intern

TEKsystems Global Services – Hyderabad, India Feb 2022 - Aug 2022

- Designed and maintained robust ETL pipelines across dev, test, and production environments using ODI 12C, enabling seamless data integration from multiple source systems into data warehouse layers.
- Optimized procedures, mappings, and workflows to populate and transform fact and dimension tables, supporting reporting and business intelligence use cases.

Data Engineering Intern

Coromandel International Limited – Hyderabad, India Jul 2021 – Aug 2021

- Analyzed sales data from multiple chemical stores to extract customer purchasing patterns and inventory movement trends.
- Developed a time series forecasting model using Exponential Smoothing to predict customers' next purchase dates, enabling optimized stock planning and reducing stockouts.

PROJECTS

AI-Powered Medical Prescription Extractor

- Built an OCR + NLP pipeline to extract structured data (patient name, medicines, dosage) from scanned prescriptions using AWS Textract and Hugging Face models, achieving 92% parsing accuracy on a dataset of 300+ prescriptions.
- Deployed a Streamlit frontend for pharmacist validation and logged 1,200+ extracted entities in PostgreSQL for downstream access and reporting.

Hospital Resource Usage Tracker

- Simulated real-time hospital equipment logs with **over 50,000 events** and used PySpark to process and analyze resource utilization trends across 5 departments (ICU, ER, Radiology, etc.).
- Visualized trends and anomalies via a Streamlit dashboard with live updates every 5 seconds, enabling early detection of 85%+ utilization spikes in critical zones.

Link-in-Bio Manager Platform

- Implemented a full-stack web app supporting user-authenticated personalized link pages with REST APIs; tested with 25+ mock users and handled over 500 link redirects.
- Containerized with Docker and deployed to Kubernetes using GitHub Actions CI/CD pipeline; achieved sub-10s rollout times and 99.9% container uptime in local K8s environment.