MALLIKARJUN AITHA

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PROFESSIONAL SUMMARY

Data professional with 3+ years of experience optimizing pipelines & analytics across enterprise, public safety, financial and nonprofits environments. Delivered 20%+ gains in process efficiency and built 125+ real-time deployments—ready to drive business ROI in 30 days.

PROFESSIONAL EXPERIENCE

Data Analyst — *University of New Haven, West Haven, CT*

Oct 2024 - Present

- Automated ETL pipelines utilizing Python, AWS, ArcGIS and PostgreSQL for New Haven Police Department, which eliminated 15+ hours/month of manual work
- Determined optimized patrol routes using DBSCAN with raster and vector analysis of historical crime data, leading to a 15% increase in officers' response time and visibility in emergent zones.
- Built 5+ predictive policing interactive GIS dashboards with Kernel Density Estimation, ARIMA and Random Forest algorithms, enhanced resource allocation

Student Associate — *Sodexo, West Haven, CT*

Jan 2024 - May 2025

- Piloted a data-driven approach to inventory management for 500+ daily meals, cutting food waste by 8%, and presented findings to fix the three biggest causes of spoilage.
- Audited budgets, reducing food waste by 12% through better forecasting and cost analysis

Data Intern — Downtown Evening Soup Kitchen, New Haven, CT

Jul 2024 - Dec 2024

- Streamlined donor ETL pipelines; increased data integrity by 30% across fundraising platforms
- Forecasted donations via Python, Excel and Power BI models; cut food waste by 25%, enhanced inventory planning and improved supply-demand alignment across meal programs
- Delivered 5+ real-time dashboards; improved visibility on volunteer and meal KPIs by 30%

Associate Data Engineer — Cognizant Technology Solutions, Hyderabad, India Sep 2021 – Jul 2023

- Processed 10M+ AMEX customer logs via Python/SQL across US, EMEA, APAC & LACC;
 enabled real-time A/B testing and localized insights, boosting CTR by 18% in 15+ countries
- Managed credit card user data via admin DB and custom SQL scripts; supported reporting, campaign optimization, and environment-specific QA (E3, UAT)
- Deployed 125+ multilingual targeted campaigns using OneCMS, AEM, React.js, and JSON; automated 300+ content ops, reducing offline dependency by 40% across 15+ regions

EDUCATION

M.S. Data Science — University of New Haven, CT (2025) | GPA: 3.86/4.0

Courses: Data Analytics, Power BI, Natural Language Processing, Machine Learning, AI, Data Engineering **B.Tech, Electronics & Communication Engineering** — JNTU, Hyderabad (2021) | GPA: 3.5/4.0

CERTIFICATIONS

- LLM Applications with Prompt Engineering NVIDIA (2025)
- Power BI & Dashboarding University of New Haven (2024)
- Adobe Experience Manager Sites Developer Adobe (2024)

TECHNICAL PROJECTS

- Mind-Mate: Mental Health Chatbot (LangChain, LLMs, HuggingFace, FAISS)
 Engineered a Retrieval-Augmented Generation chatbot, utilizing LangChain, HuggingFace, and FAISS, achieving a 0.85 F1 score and perplexity score under 50 across diverse mental health queries
- Real-Time Smart City Monitoring (AWS, Spark, Kafka)
 Designed a streaming pipeline using Spark, Kafka and AWS S3 to process 10K+ daily IoT data points; reduced latency by 40% and visualized traffic insights in Power BI
- Himalayan Climbing Trends Analysis (Tableau, R, SQL)

 Analyzed data to reveal peak trend and Everest's 185 summit-related death via interactive dashboard