Mallikarjun Aitha

West Haven, CT | +1 (203)-737-0149 | mallikarjunaitha@gmail.com | LinkedIn | Portfolio

EDUCATION

University of New Haven | Master of Science in Data Science (GPA: 3.9) | West Haven, CT **May 2025**

Jawaharlal Nehru Technological University | B.E in Electronics and Communication (GPA: 3.7) | Hyderabad, India **July 2021**

SKILLS

- Languages: Python (NumPy, Pandas, PyMc3, Matplotlib, Seaborn, Flask), SAS, SQL, R, DAX, JavaScript.
- Database: MySQL, PostgreSQL, Oracle, MongoDB
- Tools: Power BI, Tableau, ArcGIS, Excel, Jupyter, Git, Jenkins, Postman, Putty, JIRA, VS Code
- Cloud Computing: AWS (S3, Lambda, Athena, Redshift, EC2), Kafka, Spark, Docker
- Methodologies: Agile, DevOps, ETL workflows, Data Integration, Automation
- Soft skills: Effective Communication, Team Collaboration, Adaptability, Problem-Solving, Leadership and Time Management

WORK EXPERIENCE

University of New Haven | Data Analyst | West Haven, CT **Oct 2024 – Present**

- Reduced police response time by 25% by developing and maintaining a robust crime monitoring system for NHPD; built an **ETL** workflow using **Python, PostgreSQL,** and **Jenkins** to integrate RMS and public **API**s into an **ArcGIS**-compatible schema, cutting manual updates by 90% and enabling 24/7 real-time data access for 200+ officers.
- Conducted rigorous **A/B tests** on system workflows and alert triggers; data-driven optimizations based on officer interaction, boosted system response efficiency by 15% and reduced alert fatigue.
- Developed 5+ **interactive dashboards** with predictive analytics (**KDE, ARIMA, Random Forest**) and spatial analysis using raster/vector processing, identified optimized patrol zones to support crime forecasting and resource allocation decisions.
- **Managed a team** of 4 data interns: created work plans and timelines, ensured deliverables across ETL automation, GIS dashboarding, and model deployment; enforced Git version control for traceability, achieving 100% on-time project delivery.

Sodexo | Data Analyst | West Haven, CT **January 2024 – May 2025**

- Analyzed transaction data logs across multiple dining locations using **correlation analysis** and **ad-hoc analysis** to identify peak hours, optimize staffing, and improve food truck performance, boosting operational efficiency by 10%.
- Built dynamic **MS-Excel** dashboards and identified **KPIs** through inventory audits, validated waste reduction using **hypothesis testing**; tracked usage to reduce waste by 12%, ensured HACCP compliance through proactive log monitoring.

Downtown Evening Soup Kitchen | Data Analyst | New Haven, CT **July 2024 – Dec 2024**

- Enhanced product management efficiency by implementing scannable cards for **data migration**, reducing data manipulation time by 66% for **statistical modeling** using **SQL** and **AWS**, and improving visualization of user stories through KPIs in Tableau.
- Designed and maintained monthly business reports with **KPI** for pantry operations, including interactive **Tableau** dashboards and SQL to analyze and make targeted adjustments, resulting in a 12% increase in the guest satisfaction index.

Cognizant Technology Solutions | Software Engineer I (Data Analyst) | Hyderabad, India **Sept 2021 – July 2023**

- Improved risk management through data analysis across cardmember data and US, EMEA, APAC, and LACC financial services regions, focusing on eligibility, claims, and transactional trends, measured by a 20% reduction in errors and discrepancies in campaign claim processing, achieved by implementing automated **data validation** checks.
- Achieved a 20% boost in data ingestion efficiency and reduced manual effort by 30% by building advanced **PL/SQL** scripts (window functions, procedures, nested queries) to automate credit card user data workflows across issuer admin platforms, supporting QA environments (E3, UAT).
- Automated deployment of 125+ multilingual, targeted lifecycle campaigns using **OneCMS, AEM, React.js,** and **JSON** templates, cutting offline ops by 40% and accelerating omnichannel cardmember engagement across markets.
- Participated in **agile** sprint planning using **Jira**, collaborating with QA and **DevOps** to validate card product campaign pipelines, resolve deployment issues, and improve delivery velocity using **CI/CD** and **GitOps** best practices.

PROJECTS

- **Real-Time Smart City Monitoring:** Designed and deployed a real-time monitoring system processing ~1M vehicle events/day using Kafka, Spark, and AWS. Integrated containerized microservices with Docker and visualized in Power BI.
- **Mental Health Chatbot:** Built a Retrieval-Augmented Generation (RAG) pipeline with LangChain and open-source LLMs (Mistral, Llama, Phi, Falcon) from Hugging Face. Evaluated response quality using metrics like perplexity and hallucination.
- **Himalayan Climbing Trends Analysis:** Developed a Power BI dashboard using data from 3,854 summit attempts to visualize Himalayan climbing trends; highlighted Everest's dominance, autumn as peak season, and patterns behind summit-related fatalities.