

# MALLIKARJUN AITHA

(203)-737-0149 · mallikarjunaitha@gmail.com · New York City Metropolitan Area  
[mallikarjunaitha.com](http://mallikarjunaitha.com) · [linkedin/mallikarjun-aitha](https://www.linkedin.com/in/mallikarjun-aitha) · [github.com/mallikarjun](https://github.com/mallikarjun)

## PROFESSIONAL SUMMARY

Data professional with expertise in Data Engineering, Data Analysis, GIS spatial analysis, ETL pipelines, and cloud-based data solutions. Proven success in optimizing data workflows and delivering insights through tools like ArcGIS, Spark, and AWS. Adept at collaborating with cross-functional teams to solve complex data challenges.

## TECHNICAL SKILLS

<b>Programming:</b> Python, SQL, R, Shell Script	<b>GIS Tools:</b> ESRI ArcGIS, GeoPandas
<b>Data Engineering:</b> Apache Spark, AWS (Athena, S3), Azure, Databricks, Kafka, Hadoop	<b>Visualization:</b> Power BI, Tableau, Matplotlib
	<b>Cloud Platforms:</b> AWS, Azure

## PROFESSIONAL EXPERIENCE

### Center for Analytics, University of New Haven

<b>Geospatial Data Analyst</b>	<b>Oct 2024 - Present</b>
<ul style="list-style-type: none"><li>Conducted crime analysis for NHPD using ArcGIS, Python, and SQL, leveraging clustering models like DBSCAN and Hot Spot Analysis (Getis-Ord Gi*). Identified high-crime areas and improved resource allocation by 20%.</li><li>Built automated ETL pipelines with Python, AWS Lambda, and PostgreSQL, streamlined NHPD crime data ingestion, integrated predictive models to forecast trends, and reduced manual processing by 15 hours/month.</li><li>Developed 10+ interactive dashboards using ArcGIS Online, Power BI, and JavaScript (ArcGIS API), visualizing NHPD crime hotspots and time series forecasts with ARIMA and Random Forest models for proactive policing.</li></ul>	

### Downtown Evening Soup Kitchen Inc.

<b>Data Analyst Intern</b>	<b>June 2024 - Dec 2024</b>
<ul style="list-style-type: none"><li>Designed ETL workflows to consolidate donor data, improving accuracy by 30% and operational efficiency.</li><li>Built a predictive analytics pipeline using Python (Pandas, Scikit-learn), SQL, and Power BI to forecast donation trends, which helped manage inventory better and reduced food waste by 25%</li><li>Optimized 5+ Power BI dashboards to track KPIs like meal distribution efficiency and volunteer retention, integrating PantrySoft, SQL, and Python for real-time insights, improving decision-making by 30%.</li></ul>	

### Cognizant Technology Solutions

<b>Associate Data Engineer</b>	<b>Sept 2021 - July 2023</b>
<ul style="list-style-type: none"><li>Managed 200+ service requests for GCS UI Cardshop across 15+ countries, optimized multilingual webpage updates, and leveraged technologies like React.js, AEM, and AWS to improve card product visibility</li><li>Developed and deployed 125+ AMEX promotional campaigns using AEM, JSON, React.js, and CI/CD pipelines, automated online enrollment, and reduced offline promotions</li><li>Automated data validation, UI updates, and content deployment with Python, Putty, Shell Scripting, Git, Docker, and cloud-based CRM tools, reduced manual effort and streamlined global web rollouts</li></ul>	

## TECHNICAL PROJECTS

### Real-Time Smart City Monitoring (AWS, Spark, Kafka)

Built a streaming pipeline using AWS, Spark, and Kafka to process 10k+ IoT data points/day, reducing latency by 40%. Visualized traffic patterns in Power BI, enabling urban planners to optimize congestion management.

### GIS Crime Hotspot Analysis (ArcGIS, Python)

Developed a live crime dashboard for NHPD using ArcGIS, Python, Power BI, and JavaScript, integrating raster and vector analysis to visualize crime hotspots, aiding law enforcement in tracking incidents and allocating resources.

### InceptFace (Facenet-pytorch, Gradio)

Developed a facial recognition system using InceptionResNetV1 and MTCNN for detection, with a custom dataset and robust preprocessing, trained using Adam optimizer and Cross Entropy Loss, deployed via Gradio.

## EDUCATION

### Master's in Data Science

University of New Haven | GPA: 3.8/4.0 | May 2025

### Bachelor's in Electronics and Communication Engineering

Jawaharlal Nehru Technological University Hyd | Sept 2021

## EXTRACURRICULAR ACTIVITIES

Treasurer, Indian Student Council @UNewHaven  
Go-Getter Award, UNewHaven  
Campus Connector, UNewHaven