

# Nikhila Madhunala

nikhilamadhunala01@gmail.com | 304-460-5482 | linkedin.com/in/nikhila-madhunala

## PROFESSIONAL SUMMARY

---

Data Scientist skilled in time series, clustering & forecasting with expertise in Python, TensorFlow & Spark. Experienced in building real-time pipelines and deploying ML models on AWS, delivering insights that improve accuracy and drive business growth.

## EDUCATION

---

### Master's in Business Analytics

University of North Texas, Denton, TX – December 2024

### Bachelor of Technology in Computer Science

CMR College of Engineering and Technology, India – August 2021

## SKILLS & TECHNOLOGIES

---

**Programming:** Python, Java, Go, Django, Flask, Kubernetes, Docker

**Data Engineering:** Feature engineering, model monitoring, model training

**Databases:** DynamoDB, MongoDB, PostgreSQL

**Cloud:** Amazon Web Services (SageMaker, S3, Glue), Google Cloud Platform, Microsoft Azure

**DevOps:** Kubeflow, MLflow, MLOps, CI/CD pipelines, Terraform

**Analytics/ML:** Machine learning, deep learning, computer vision, natural language processing, time series

**Practices:** Collaboration, communication, leadership, observability, optimization, research

## PROFESSIONAL EXPERIENCE

---

### Data Scientist Intern

Next Era Path

Feb 2025 – Present

- Faced recurring stockouts due to inaccurate planning. Built time series forecasting models for sales and inventory. Improved accuracy by 20% and reduced shortages significantly.
- Conducted experiments to identify optimal forecasting methods and hyperparameters. Balanced accuracy with computational efficiency for business needs.
- Collaborated with product teams to use forecast outputs in feature development. Helped shape new enhancements tied directly to demand cycles.
- Documented assumptions and methodologies clearly. Ensured transparency and reproducibility across data science initiatives.

### Data Analyst

Infosys (Client: Westpac), India

Jan 2021 – Dec 2022

- Developed ingestion pipelines with Apache Spark and Flink to process logs and sensor streams. Enabled real-time insights for operations teams.
- Deployed ML models as REST APIs with Flask on AWS Lambda. Reduced infrastructure overhead and delivered auto-scaling with demand.
- Automated retraining pipelines triggered by drift detection. Maintained long-term accuracy and reliability of deployed models.
- Partnered with stakeholders to integrate real-time outputs into decision systems. Improved responsiveness to operational challenges.

## Data Scientist Intern

Powersoft Global Pvt Ltd

May 2020 – Aug 2021

- Applied clustering algorithms to analyze customer behavior. Guided targeted marketing campaigns that drove a 10% increase in conversion.
- Worked with product managers to translate clustering insights into personalized feature strategies. Increased engagement and retention.
- Ensured observability and monitoring across deployed analytics. Provided reliable feedback loops for business teams.
- Presented results in clear, actionable formats to non-technical stakeholders. Built trust in data-driven decision making.

## PROJECTS

---

### Capstone: Predicting Vehicle Recalls from Complaint Data

Aug 2024 – Dec 2024

Inherited fragmented data pipelines across AWS, Azure, and GCP that caused duplication of effort. Consolidated infrastructure into unified pipelines for training and deployment. Delivered a single platform that improved scalability and reduced maintenance costs.

Implemented CI/CD pipelines integrating Kubeflow and MLflow for continuous training and deployment cycles. Automated testing, validation, and release approvals. Significantly shortened model release cycles and increased business agility.

Drove adoption of observability practices by integrating monitoring with Prometheus and Grafana. Enabled teams to proactively track model drift and infrastructure health. Reduced time-to-detect and resolve issues, enhancing reliability.

Acted as a mentor for engineers transitioning into MLOps roles. Provided hands-on guidance in containerization, distributed computing, and cloud cost optimization. Built a knowledge-sharing culture that elevated overall technical maturity.