Aditi Reddy Doma

aditidoma@gmail.com | 917-337-7045 | linkedin.com/in/aditireddydoma | GitHub | Portfolio

EDUCATION

Masters of Science in Data Science *Expected: December 2026*
Rochester Institute of Technology (*GPA: 4.0/4.0*) *Rochester, New York*
Relevant Coursework: Applied Statistics(A), Database Management(A), Visual Analytics(A), Software Construction(A)
Bachelor of Technology in Artificial Intelligence *July 2020 - May 2024*
Mahindra University (*GPA: 3.56/4.0*) *Hyderabad, India*
Relevant Coursework: Machine Learning(A-), Data Structures & Algorithms(A), Generative Artificial Intelligence(A-), Operating Systems(A-)

SKILLS

- **Programming Languages:** Python, Java, R, MySQL
- **Machine Learning**: Pandas, NumPy, Scikit-Learn, Keras, TensorFlow, PyTorch
- **Cloud Platforms:** AWS, Kafka, Databricks, Apache Spark
- **Tools & Technologies:** Tableau, Power BI, Looker, MS Excel, MS Word, MS PowerPoint, ETL, Git

WORK EXPERIENCE

Data Science Research Intern *May 2025 - Present*
icitizen *Remote, USA*
- **Web scraped and analyzed 500K+ unstructured congressional profiles** from Congress.gov and Bioguide websites using APIs, transforming unstructured data into structured datasets stored in **AWS DynamoDB** for **real-time updates**.
- **Designed a dynamic U.S. map** using **D3.js**, visualizing senators, their sponsored bills and co-sponsors by state.
- **Increased user engagement by 27.2%** on the iCitizen app by **developing** a **chatbot** predicting likelihood of a bill becoming law.

Graduate Teaching Assistant *January 2025 - Present*
Rochester Institute of Technology *Rochester, New York*
- Guided 200 undergraduates in **database systems** and **SQL** through labs focused on **query writing** and **relational data modeling**.

Business Analyst Intern *December 2023 - July 2024*
StandardWings Technologies Pvt. Ltd. *Nashik, India*
- **Documented client requirements** by collaborating with **15+ cross-functional** team members and **attending client meetings**.
- Extracted **actionable insights** from **20,000+ rows** of patient data using **Pandas**, which contributed to the design of an application that improved patient onboarding and streamlined appointment scheduling.
- Presented the application functionality to technical and non-technical stakeholders using clear **MS PowerPoint** decks.

Machine Learning & Data Analyst Intern *June 2023 - August 2023*
Cloud4C *Hyderabad, India*
- Achieved **over 90% accuracy in** a **sentiment analysis model** using **BERT** to analyze customer feedback.
- **Performed large-scale text analysis** on customer feedback using **Databricks** with **PySpark** for data processing.
- Identified **top 5 recurring customer concerns** using **unsupervised learning (K-Means clustering)** on BERT embeddings**.**

PROJECTS

Portfolio Allocation Model (GitHub) *September 2022 - December 2022*
- Researched and scraped **5 years of stock data** for 9 companies across 3 sectors using Yahoo Finance and optimized portfolio allocation through **mean-variance modeling** using **Pyomo, NumPy and Pandas**.
- Identified Buy & Hold as the optimal investment strategy with **15% ROI** by performing **statistical analysis** of risk-return trade-off assessments using **Monte Carlo simulation** in **Python.**

Covid Data Exploration and Visualization (GitHub) *August 2023 - October 2023*
- **Identified COVID-19 and vaccination impact trends** using **MS Excel** and **SQL queries**. Visualized the trends in **Tableau**.

Strategic Insights for Mitron Bank's New Credit Card Line (GitHub) *September 2024 - November 2024*
- **Developed 3 Power BI dashboards** using **Power Query** to analyze income, expenditure and customer segmentation trends.

Energy Consumption Predictor (GitHub) *February 2025 - April 2025*
- Forecasted hourly energy consumption with **92.54% accuracy** using **Supervised Learning (Linear Regression)** in **R** for **5K+ homes**.
- Designed a **Shiny dashboard** to visualize how temperature, time and house attributes **influence future energy consumption**.

AutoConvo: Real-Time Driver Intent Detection (GitHub) *May 2025 - September 2025*
- Designed a **voice command system** using **Whisper ASR** and **DistilBERT** to classify **40+ in-car voice commands** at **92% accuracy**.
- **Optimized deployment** on **Jetson Nano** with **TensorRT** and **CUDA** to handle **real-time voice commands** and deliver relevant responses via **light-weight APIs**.

IOT Telemetry Analytics for Health Monitoring Devices (GitHub) *September 2025 - December 2025*
- Developed **ETL pipeline** using **Kafka** + **PySpark** to process **2M+ IoT telemetry records** from health devices (glucose, heart-rate).
- **Reduced false alarms by 18%** by **fine-tuning anomaly detection models (Isolation Forest, ARIMA)** for abnormal health data.