

MEGHNA REDDI

973.906.9462 | mreddi2001@gmail.com | </in/meghnareddi> | [Github](#) | Jersey City, NJ

EDUCATION

New Jersey Institute of Technology, Newark, NJ – Master of Science (M.S.) – Data Science, Concentration in Statistics – GPA: 3.8
Mahatma Gandhi Institute of Technology, Hyderabad, IND – Bachelor of Technology (B.Tech.) – Computer Science – GPA: 3.5

TECHNICAL SKILLS

Programming Languages: Python (Matplotlib, Seaborn) | R (Solver, ggplot) | SQL | MATLAB

Statistical Analysis: Regression Analysis | Hypothesis Testing | A/B Testing | Time Series Analysis

Data Visualization & Business Intelligence: Tableau | Power BI | Looker | RShiny | Excel

Mathematical Optimization & Modeling: Sensitivity Analysis | Nonlinear Programming | Mixed-Integer Linear Programming | Transportation, Allocation & Blending Models | Regression & Curve Fitting | Convex & Nonconvex Optimization

Cloud Services & Data Engineering: AWS (Quicksight) | Azure | GCP BigQuery | Databricks | Microsoft Fabric

Databases & Automation: Redshift | Oracle | MS SQL Server | MySQL | Docker | Git | Power Automate | Postman

Project Management: JIRA | Confluence | Agile | Scrum

Certifications: [Google Data Analytics Professional](#) | [AWS Certified Cloud Practitioner](#) | [Generative AI with Large Language Models](#)

PROFESSIONAL EXPERIENCE

New Jersey Equity in Commercialization Collective | Data Research Analyst – Newark, NJ **01/2024 – 12/2024**

- Enhanced data quality for innovation trend analysis by reducing FPR by 60% in university name identification using regex and fuzzy matching, processing 13GB of USPTO PatEx data in a Data Lakehouse, enabling reliable insights for patent commercialization
- Spearheaded advanced data visualization techniques by creating Power BI dashboards using Dataflow Gen2, transforming complex patent data into easily digestible insights for non-technical stakeholders, driving data-informed decision-making for clients
- Built ETL (Extract, Transform, Load) pipelines, reducing data processing time by 20%, allowing seamless handling of evolving datasets
- Improved data retrieval by 11% through API integration (RESTful web services), validating gender information from LinkedIn and university web pages, ensuring higher accuracy and reliability in demographic analysis

New Jersey Institute of Technology | Teaching Assistant – Newark, NJ **01/2024 – 12/2024**

- Progressed assignment scores by 15% through 6 lab exercises in RStudio on CNNs, Data Analysis and Large Language Models (LLMs)
- Conducted a data visualization & statistical modeling workshop using Python, teaching data wrangling and interpretation practices

Zenoti India Pvt Ltd | Data Analyst – Hyderabad, IND **07/2022 – 07/2023**

- Designed and implemented 10+ custom DAX KPIs in Power Query to analyze undertrained customer accounts, providing region-specific insights to PMs, leading to targeted improvements that increased course completion rates by 2 courses per month
- Reduced churn by 12% in key accounts by developing a BI dashboard (Google Analytics connector) to monitor customer activity, churn rates, and revenue trends, resulting in a \$20,000 quarterly revenue boost through retention strategies mitigating seasonal churn
- Developed 4+ Excel reports using Pivot Tables and VLOOKUP to create visualizations, serving as data sources for Power Automate flows, saving 3 hours per week by automating the employee reporting process and improving operational efficiency
- Collaborated with cross-functional Agile Scrum teams to refine user stories, align development with business goals, ensuring timely execution of testing and feature rollouts

ACADEMIC PROJECTS

Election Data Visualization and Analysis ([Elections Dashboard 1](#) , [Elections Dashboard 2](#)) **10/2024 – 12/2024**

- Built an interactive Tableau dashboard analyzing U.S. election data (5 GB) stored in AWS Redshift, uncovering voter turnout trends
- Designed complementary visualizations and filters in Tableau, allowing data exploration by state, gender, and year
- Tripled student engagement, attracting 500+ weekly dashboard views, increasing political awareness among students

Time Series Forecasting & Analysis on Divvy Bicycle Sharing System **10/2023 – 12/2023**

- Designed an ETL pipeline using AWS Glue to preprocess 25M+ records stored in S3 data lake optimizing data transformation
- Performed exploratory data analysis (EDA) using Athena, visualizing ride duration and user behavior trends With QuickSight
- Trained and fine-tuned time series models (ARIMA, VAR, Prophet) on AWS SageMaker reducing forecasting error by 20%, improving demand prediction and resource management
- Deployed models using Docker and established CI/CD pipelines with GitHub Actions, ensuring reproducibility & continuous integration

BUSINESS ANALYTICS & OPTIMIZATION CASE STUDIES

Coastal Telephone Company – Revenue Maximization

- Developed a nonlinear pricing model to optimize calling rates, increasing total revenue by 10%
- Formulated demand functions based on historical data and used curve fitting techniques in R
- Applied Solver's optimization to maximize total revenue, adhering to demand elasticity constraints

Veerman Furniture Company – Profit Maximization & Resource Allocation

- Optimized production strategy to maximize profits, increasing by \$2500, considering production constraints for furniture
- Built a production model to determine optimal supply using Solver; Conducted sensitivity analysis to assess profitability vs availability

Diaz Coffee Company – Blending Optimization

- Curated a cost-effective coffee blend, reducing production costs by \$3.50 per pound, maintaining aroma and strength standards
- Applied proportional blending constraints and found the optimal mix using linear programming; Understood supply-chain limitations to optimize sourcing costs while preserving quality; reduced production time per batch by 1.5 hours, improving overall blending efficiency