

# Gnana Tulasi Makineni

+1(234)243-7019 • makinenitulasi02@gmail.com

## CARRER OBJECTIVE

---

Results-driven Data Scientist & Power BI Developer with experience in machine learning, data visualization, and predictive analytics. Skilled in transforming raw data into actionable insights for manufacturing, academic, and research domains. Strong background in Python, SQL, and Power BI, with a proven ability to improve performance, optimize processes, and communicate insights to business stakeholders.

## EXPERIENCE

---

**Data Scientist** | *Actual Reality Technologies* Jan 2025-Ongoing

- Built RebarIQ, a Python pipeline that converts structural engineering PDFs into structured JSON representations of foundation plans and generates rebar quantity takeoffs using Gemini by giving JSON input that have been generated.
- Developed a Power BI dashboard for an insurance client modeling two claim-rerouting scenarios (50% and 80% of claims shifted to the lowest-cost provider) and quantifying projected savings against historical claim data to support provider negotiation and network optimization decisions.
- Designed and implemented an automated alerting system for a manufacturing facility using historical alert data, resulting in 10% reduction in energy consumption and 20% improvement in critical resource lifespan.
- Collaborated with the data science team at a glass manufacturing company to reduce energy usage by 4% through data-driven process optimization.
- Designed and developed Power BI dashboards for monitoring chemical exposure limits, enabling manufacturer to assess and compare safety compliance across multiple plants using chemical sample data.
- Conducted an in-depth analysis of health and safety incidents around long weekends, revealing a 30–40 incident increase post-holiday periods and supporting improvements in safety planning.

**PowerBi Developer** | *BGSU Campus Operations* Aug 2023-Jan 2025

- Developed and maintained 5 interactive Power BI dashboards and enterprise data models, supporting strategic decision-making in financial and facilities management for campus planning and operations team.
- Built advanced DAX measures and M Query transformations to address complex reporting requirements and enhance data integrity.
- Optimized data models and reports for performance and user experience, achieving a 25% improvement in load times.
- Managed deployment and governance of Power BI Service workspaces, including dataset refreshes, user permissions, and security configurations.

**ML Research Intern** | *MyEdMaster* Dec 2022 - June 2023

- Developed a machine learning model to estimate biological age using health and lifestyle questionnaire data from the NHANES public dataset (20K records).
- Engineered features from physiological, behavioral, and medical variables to train regression models (Random Forest, XGBoost, ElasticNet).
- Evaluated model performance using MAE and  $R^2=0.89$  metrics; interpreted feature importance to identify key aging-related predictors.

## EDUCATION

---

**Masters in Computer Science** May 2025

Bowling Green State University, Bowling Green, Ohio GPA: 3.8/4

**Bachelors of Technology, Computer Science** June 2023

Jawaharlal Nehru Technology University, kakinada, India GPA: 8.0/10

## SKILLS

---

**Technical skills** | *Computer Science*

- **Programming & Data Science:** Python, SQL, Spark, Pandas, NumPy, JavaScript, Git, Excel

- **Machine Learning & Statistics:** Regression Analysis, Random Forest, XGBoost, LightGBM, Keras, Clustering, Unsupervised Learning, PCA, A/B Testing, Cross-Validation, Model Evaluation, Predictive Analytics
- **Time-Series & Alert Analytics:** Alert Analysis, Anomaly Detection, Trend Analysis, Statistical Thresholding
- **Data Visualization & BI:** Power BI, Tableau, Matplotlib, Seaborn, Plotly, KPI Dashboards, Data Storytelling
- **Big Data & Cloud:** Databricks, Distributed Computing, Cloud-based Systems, Terraform
- **Advanced Analytics:** Generative AI, Natural Language Processing (NLP)
- **Document Drawing Automation:** PDF parsing, structured JSON extraction, ezdxf (DXF/AutoCAD), Excel automation