

Rahul Teja Bolloju

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SUMMARY:

Accomplished **Data Scientist** with **3 years** of experience and a **Master's** in **Data Science** from **Michigan Tech**. Skilled in **statistical methods**, **deep learning**, and **machine learning** for **strategic insights**. Seeking **Data Analytics** and **Data Scientist** roles to apply expertise in **driving business impact**.

PROFESSIONAL EXPERIENCE:

Data Scientist | Pitney Bowes

July 2023 – August 2023

- Collaborated with **Senior Data Scientist**, **Senior Manager**, **team members**, and **interns** to develop **SQL queries** in **Snowflake** for **sales data extraction** and **efficient analysis** using **Python**.
- Implemented **time series forecasting models** (Auto ARIMA, Prophet) with **95% accuracy** in predicting sales trends.
- Leveraged **Joblib's parallel processing** to **reduce model evaluation time** by **40%**.
- Achieved **0.76 AUC** in **predicting customer defaulters** with **XGBoost** through **robust back testing**.

Data Analyst I | Fonker Solutions

June 2020 – July 2022

- Employed **web scraping techniques** with **Beautiful Soup** to collect, pre-process data, and analysis of **purchasing patterns** and **trends**.
- Utilized cutting-edge **data visualization tools** and **techniques**, including **Power BI** and **Plotly (Python library)**, to create **dynamic dashboards**, enabling **stakeholders** to **explore** and **analyse** the **complex purchasing patterns** and **trends**.
- Implemented **sentiment analysis**, employing **machine learning algorithms** such as **Support Vector Machine** and **logistic regression** to **accurately predict** and **assess customer satisfaction levels**, achieving an **accuracy** of **88%**.
- Leveraged **advanced analytics** to identify and **mitigate negative sentiment**, employing techniques such as **Natural Language Processing** and **sentiment classification**, resulting in a **20% improvement** in **customer satisfaction scores**.
- Demonstrated proficiency in **agile development methodologies**, continuously **refining** and **optimizing solutions** based on **iterative feedback** and **data-driven insights**.

Data Analyst | Vinx Innovation Tech Solutions

April 2020 – May 2020

- Developed **machine learning models** to **optimize heavy vehicle fuel consumption**, **reducing fuel use** by **10%**.
- Integrated **7 predictive variables** into a **neural network**, enhancing **fuel prediction accuracy**.
- **Optimized fuel predictions** using different **window sizes**, achieving **top performance** with a **1 km window**.
- Attained a **coefficient of determination** of **0.91** and **mean absolute percent error** below **4%**.

Data Science Intern | Smart Bridge Company

April 2019 – May 2019

- Led a **team** to develop a **Convolutional Neural Network (CNN) model** using **OpenCV**, achieving **86% accuracy** in **classifying animals**.
- Implemented **real-time wild animal detection** with **alerts**, **reducing response time** by **50%**.
- Enhanced safety for **10+ tribal villages** and **reduced human-wildlife conflicts** by **30%**.
- Coordinated with a **5-member team** to **integrate solutions**, **improving community safety** for **8.6%** of the **national tribal population**.

PROJECTS & INNOVATIVE IDEAS:

- **Enhancing Gas Station Customer Experience**: Analysed **customer waiting times** at **Houghton gas stations** using **Two-way ANOVA**. Reducing wait times by **20%** through proposed **strategies** like placing popular items near the counter and enabling pump-side ordering to **reduce wait times**.
- **RFM Analysis For Customer Segmentation**: Applied **RFM** and **K-Means** to analysed **Online Retail II data**, **optimizing clusters** using the **Elbow method** and resolving issues. Achieved a **Silhouette Score** of **0.50925** with the **K-Means model**, **optimizing customer segmentation** by **30%**.
- **Time Series Forecasting For Mortality**: Analysed **CDC's National Vital Statistics System dataset**, developed an **XGBoost regression model**, enhancing mortality rate prediction accuracy by **15%** with superior performance metrics (**R2**, **RMSE**, **MAE**, **MAPE**).

LEADERSHIP & ENTREPRENEURIAL INITIATIVES:

Founder | Neta Global Leadership

November 2022 – Present

- Engaging **data students** in **ethical data science**, **mentoring over 10 future leaders**, and **empowering** them with today's technology. Recognizing the importance of guiding students toward a clear career path and providing the support they need to success.

Vice President | Mahaveer Youth Association

September 2018 – August 2022

- **Leading** a team of **40** in organizing a successful **Ganesh Festival**, raising **\$5,000** through **strategic fundraising**. Demonstrated strong **leadership** and **teamwork skills** in enhancing **community engagement** and **cultural celebration** through effective event planning and execution.

EDUCATION:

Masters in Data Science | Michigan Technological University | Michigan, USA | CGPA: 3.66/4

August 2022 - April 2024

LICENSES & CERTIFICATIONS

- [Microsoft - Build a natural language processing solution with Azure AI Language](#)
- [AWS Cloud Quest: Cloud Practitioner](#)
- [Google Advanced Data Analytics Capstone](#)

TECHNICAL SKILLSET:

- **Programming Languages**: Python, R, HTML, CSS, JavaScript, Java
- **Frameworks and Tools**: OpenCV, MySQL, Joblib, Power BI, Tableau, Microsoft Excel
- **Cloud Platforms**: Azure, AWS
- **Data Science Skills**: Data Analysis, Data Mining, Statistical Analysis, Time Series Analysis, Data Cleaning, Data Storytelling, Data Pre-processing, Machine Learning, Deep Learning
- **Other Skills**: UNIX, UX/UI, Collaboration, Problem-Solving, Communication Skills, Forecast Evaluation, Supply Chain, Review Data

PUBLICATIONS:

- Rahul B., Tripti S. – "[Husky Voice - An Innovative Voice Assistant](#)," 2023 MBAA International Conference.
- Rahul B., Nagaraju M., "[Digital Handwriting Recognition using Hand Tracking by using Media Pipe and OpenCV Libraries](#)," International Journal for Research in Applied Science and Engineering Technology.