# RAJA BRAHMENDRA VEEREPALLI

San Marcos, Texas | +1 510-709-9168 | rajabrahmendrabuz@gmail.com | LinkedIn | Portfolio | GitHub

#### PROFESSIONAL SUMMARY

Detail-oriented Data Analyst with expertise in Python (Pandas, NumPy, Scikit-Learn), SQL, and ETL workflows using PostgreSQL, AWS Redshift, and Apache Airflow. Skilled in data cleaning, validation, and predictive modeling with CNN/LSTM, and experienced in developing interactive dashboards in Tableau, Power BI, and AWS QuickSight. Adept at leveraging big data tools, cloud platforms, and business intelligence solutions to improve reporting accuracy, operational efficiency, and data-driven decision-making.

#### **TECHNICAL SKILLS**

Programming & Scripting: Python (Pandas, NumPy, Scikit-Learn, TensorFlow, PyTorch), SQL, R, C++
Databases & Data Warehousing: PostgreSQL, MySQL, MongoDB, AWS Redshift, Snowflake, BigQuery
Big Data & ETL: Apache Spark, PySpark, Airflow, ETL pipeline design, Data transformation, Data cleansing
Cloud & DevOps Tools: AWS (S3, Redshift, Glue, Lambda), Azure Data Services, Git, Linux, Docker, Kubernetes

Data Visualization & BI Tools: Tableau, Power BI, AWS QuickSight, Matplotlib, Seaborn, Plotly, Dash

Al/ML & Deep Learning: CNN, RNN, LSTM, Transformer Models, Regression, Classification, Clustering, NLP, Predictive Modeling Analytics & Data Tools: Excel (Pivot Tables, Power Query), Jupyter Notebook, Google Colab, Data profiling & exploratory data analysis Version Control & Collaboration: GitHub, GitLab, Jira, Confluence

## **PROFESSIONAL EXPERIENCE**

Data Analyst Intern Vilindha Technologies Private Limited | Hyderabad May 2025 - Aug 2025

- Assisted in building ETL workflows using Python and SQL to load datasets into PostgreSQL and AWS Redshift.
- Supported the optimization of SQL queries and database views for smoother reporting.
- Created basic Tableau and Power BI dashboards to visualize sales and operational data.
- Performed data cleaning and transformation using Pandas and NumPy to improve dataset accuracy.
- Conducted analysis of historical sales data to identify trends and patterns for team discussions.
- Collaborated with team members to understand KPIs and support reporting requirements.

## **PROJECTS**

## Railway Track Crack Detection System

- Developed an end-to-end deep learning pipeline using YOLOv5 to detect and classify railway track cracks, improving detection accuracy by 92%.
- Created SQL database schema to store crack detection results and trends, enabling efficient data retrieval for reporting and analytics.
- Built interactive dashboards using Matplotlib and Seaborn to visualize track conditions, reducing manual inspection time by 60%
- Applied image preprocessing, feature extraction, and model evaluation techniques to enhance model performance and reliability.

#### Sales Data ETL Pipeline

- Designed and automated ETL pipelines to ingest and transform CSV sales data into AWS Redshift, reducing manual reporting efforts by 80%.
- Developed optimized SQL queries and views for generating real-time BI reports, enhancing decision-making across sales operations.
- Scheduled Python scripts with Airflow to orchestrate daily data workflows, ensuring pipeline reliability and 95% data accuracy.
- Implemented data transformation, cleansing, and validation processes to maintain high-quality datasets for analytics and visualization.

# **Loan Eligibility Prediction**

- Built a CNN-LSTM pipeline to predict loan eligibility, improving prediction accuracy and reducing manual assessment effort.
- Executed end-to-end preprocessing including missing value imputation, feature scaling, and categorical encoding for financial datasets.
- Designed training, validation, and testing pipelines to optimize model performance, reducing overall model development time by 30%.
- Created Tableau and Matplotlib dashboards to visualize prediction results and insights for business stakeholders.

# **EDUCATION**

Masters in Computer Science with Data Science

Aug 2025 - pursuing

State University | San Marcos, TX

Bachelor of Technology in Artificial Intelligence & Machine Learning

Jul 2021 - Jun 2025

SRM Institute of Science and Technology | Chennai, India

#### **CERTIFICATIONS**

- Python Programming Certification
- AWS Certified Solutions Architect Associate
- Google Data Analytics Professional Certificate Coursera
- IBM Data Analyst Professional Certificate Coursera
- Microsoft Power BI Data Analyst Coursera
- Excel Basics for Data Analysis Coursera