# RUTHVIK VARMA GADIRAJU

Glassboro, NJ | +1(856) 652-4932 | ruthvikvarma7725@gmail.com | LinkedIn

#### PROFESSIONAL SUMMARY

Detail-oriented Data Analyst with a Master's in Data Science and hands-on experience transforming complex datasets into actionable insights across supply chain, IoT, e-commerce, and CRM domains. Skilled in leveraging SQL, Python, and advanced BI tools (Power BI, Tableau, D3.js) to design interactive dashboards, automate ETL pipelines, and conduct statistical and predictive analyses. Proven ability to integrate SAP EWM/TM, IoT sensor streams, and multi-source APIs into unified reporting systems, improving operational efficiency, KPI visibility, and decision-making speed. Adept at defining data models, building performance metrics, and collaborating with cross-functional teams to deliver scalable, data-driven solutions that generate measurable business impact.

### **TECHNICAL SKILLS**

Programming & Query Languages: Python, SQL, R, JavaScript

Data Visualization & BI Tools: Power BI, Tableau, Looker Studio, D3.js, Plotly, Matplotlib, Seaborn

**Databases & Data Warehousing:** MySQL, PostgreSQL, SAP HANA, Snowflake, Google BigQuery, Amazon Redshift **Analytics & Machine Learning:** Scikit-learn, TensorFlow, Keras, Time Series Forecasting, Natural Language Processing (NLP), Recommendation Systems, Clustering, Regression, Classification, Predictive Modeling, Statistical Analysis

**Data Engineering & ETL Tools:** Apache Airflow, dbt, Power Query, DAX, REST APIs, ETL Pipelines, Data Modeling, Data Cleansing, Data Transformation

Cloud & Big Data Platforms: AWS (S3, RDS, Redshift, Lambda), Azure Synapse Analytics, Google Cloud BigQuery Business & Product Analytics: A/B Testing, Cohort Analysis, Funnel Analysis, KPI Tracking, Business Process Mapping, Product Metrics Dashboards

**Collaboration & Development Tools:** Jupyter Notebook, Git, GitHub, Visual Studio Code, Excel (Pivot Tables, Power Pivot), Confluence, Jira

#### **PROFESSIONAL EXPERIENCE**

Data Analyst May 2022 -May 2023 Arthicus Global

- Leveraged SQL to examine SAP EWM/TM warehouse and transportation data, uncovering inefficiencies in stock turnover and delivery lead times that led to operational adjustments improving efficiency by 18%.
- Created dynamic Power BI and Tableau dashboards merging logistics, procurement, and SAP data, giving managers on-demand visibility into KPIs and cutting manual reporting work by 35%.
- Automated SAP and vendor API data ingestion through Python ETL workflows, applying validation and transformation rules that delivered 99% accurate datasets and reduced data preparation time by over 20 hours weekly.
- Designed custom DAX measures and Power Query transformations that allowed supply chain leaders to drill into vendor, shipment, and product metrics, accelerating problem resolution for delayed orders.
- Conducted RF scanner movement and barcode activity analysis to identify high-traffic warehouse zones, enabling layout redesigns that shortened picker travel paths by 22% and boosted throughput.
- Integrated live vendor and shipment tracking via REST APIs into BI dashboards, equipping operations teams with early delay alerts that improved vendor communication times by 15%.
- Collaborated with cross-functional teams to define measurable KPIs for procurement cycles, vendor
  performance, and inventory accuracy, embedding these metrics directly into BI systems for continuous
  tracking.
- Delivered executive-ready reports and visualization packages using SQL and BI tools, enabling leadership to make timely, data-backed decisions on inventory planning and vendor negotiations.

#### **Data Analyst**

### **Entuple Technologies Pvt Ltd**

- Processed and analyzed IoT sensor data in Python (Pandas, NumPy) to detect abnormal machine behavior, cutting unplanned downtime by 15% through early intervention alerts.
- Built time-series forecasting models in Scikit-learn to anticipate sensor failures, enabling proactive maintenance that reduced unexpected breakdowns by 20%.
- Developed Tableau dashboards to visualize live sensor readings, improving equipment monitoring speed and helping operations teams respond to anomalies within minutes.
- Enriched sensor datasets with environmental context via REST APIs, boosting predictive model accuracy by 10% and enhancing failure detection reliability.
- Generated statistical process control charts in Python to track deviation patterns, leading to actionable insights that supported Six Sigma quality improvement goals.

- Automated end-to-end ETL processes for sensor data cleansing and transformation, saving over 70% of manual processing time and ensuring consistent daily reporting.
- Partnered with engineering teams to define critical data fields for predictive analytics, ensuring analysis
  outputs aligned with industrial automation objectives.
- Established multi-stage validation checks to maintain dataset integrity, minimizing false-positive alerts and strengthening decision-making accuracy.

#### **PROJECTS**

#### **Suspicious Activity Detection**

- Leveraged Tableau and D3.js to perform multi-dimensional analysis on communication and financial datasets, pinpointing transaction clusters linked to potential criminal activities.
- Engineered force-directed network graphs and chronological activity maps to reveal hidden relationships between suspects and track evolving interactions over time.
- Developed interactive dashboards with dynamic filters for transaction type, timeframe, and location, accelerating investigative decision-making and improving case closure rates.

# COVID-19 Forecasting & Healthcare Dashboard

- Built predictive classification and time-series models using Scikit-learn and Prophet, delivering an 89% forecast accuracy on case count trends for proactive health measures.
- Automated API-driven ETL pipelines to refresh dashboards daily, ensuring healthcare administrators accessed real-time, validated pandemic data without manual intervention.
- Designed Tableau dashboards for monitoring hospital capacity and ICU resource utilization, enabling precise allocation that reduced critical care shortages.

#### **Customer Behavior Analysis**

- Applied clustering algorithms on CRM and e-commerce datasets to classify customers into churn-risk and high-value groups, enabling targeted retention strategies.
- Created recommendation engine prototypes leveraging purchase history and browsing behavior to increase upsell and cross-sell opportunities across digital channels.
- Built Power BI dashboards integrating sales, marketing, and customer data, allowing stakeholders to monitor KPIs and personalize campaigns in near real time.

# Online Blood Donation Management System

- Designed normalized SQL database schema with role-based permissions, ensuring secure storage and controlled access to donor and recipient information.
- Implemented optimized SQL queries for instant blood type availability checks, significantly reducing time to match donors with recipients in urgent cases.
- Created ER diagrams and applied strict data integrity constraints, maintaining compliance with healthcare information standards and preventing record duplication.

### **EDUCATION**

M.S., Data Science

Rowan University | NJ

# **B.Tech, Electronics & Communication Engineering**

KL University | India

### **CERTIFICATIONS**

- Google Data Analytics Professional Certificate Coursera
- IBM Data Science Professional Certificate Coursera
- Data Analysis with Python **DataCamp**
- Machine Learning Specialization Coursera
- SQL for Data Analysis **Udemy**