Praveen Satya Rajamanickam Vijayaraghavan

[psatyarv@gmail.com](mailto:psatyarv@gmail.com%20) | 469-471-4540 | [linkedin.com/in/praveen-satya-r-v](https://www.linkedin.com/in/praveen-satya-r-v) | [github.com/praveensatyarv](https://github.com/praveensatyarv)

# SUMMARY

## Certified Tableau and Alteryx professional with 3+ years of experience leveraging SQL, Python, and BI tools to deliver actionable insights, automate reporting, and drive $100K+ in savings. Skilled at translating complex data into clear business recommendations and enabling self-service analytics for technical and non-technical stakeholders.

## SKILLS & CERTIFICATIONS

## Analytics & BI Tools: Tableau (Certified Specialist), Power BI, Looker Studio, Qlik Sense, Excel

## Programming & Data Engineering: SQL, Python, R, Apache Airflow, Snowflake, DBT, GCP, BigQuery, Hadoop, Spark, Hive, Postgres, Alteryx

## Machine Learning & Advanced Analytics: Regression, Random Forests, XGBoost, SVM, TensorFlow, PyTorch, Hypothesis Testing, Prophet

## Certificates: Tableau Desktop Specialist, Alteryx Designer Core, Power BI (Datacamp), Snowflake (LinkedIn), Looker Studio (LinkedIn)

# WORK EXPERIENCE

## Copart Inc., Dallas, TX — Data Analyst Intern *May 2024 – May 2025*

## Prevented $100K+ in quarterly revenue loss by enabling rapid anomaly detection across 70+ business metrics using a platform built with BigQuery and Apache Airflow.

## Achieved $325K in potential savings in 6 months by presenting key insights to executive leadership and client stakeholders through a Tableau dashboard benchmarking AI vs. manual subhauler assignments, uncovering 45% adoption, overspending, and high-cost usage.

## Boosted yard efficiency by 15% across 200+ locations by creating a productivity Tableau dashboard tracking vehicles sold/received per headcount and identifying underperformance.

## Enhanced user experience for 100+ stakeholders by improving Tableau dashboard load times by 75% (20s to 5s) through SQL query optimization and implementing Tableau performance best practices, leading to increased adoption and engagement.

## Eliminated manual root-cause analysis by building and deploying an AI-powered Gemini solution, enabling business users to instantly identify drivers of change and freeing up 15 FTE analysts—boosting decision confidence by 85% and cutting investigation time from 40+ hours to zero.

## Accelerated insight generation by developing an AI-driven Data Assist tool that reduced ad-hoc analysis time from days to 5 seconds, enabling junior analysts and business users to self-serve insights and minimize reliance on the reporting team.

## Migrated AI-generated embeddings from BigQuery to Postgres Vector DB, optimizing semantic search capabilities, reducing storage expenses by 70%, and improving Data Assist tool query performance by 2x.

## Delivered a proof-of-concept semantic layer using DBT MetricFlow that empowered the reporting and analytics team to generate SQL queries from natural language, reducing time spent on query writing by 10+ hours and streamlining self-service analytics.

## Drove a 90% reduction in customer inquiries related to the Call-For-Release (CFR) process by constructing a self-service Tableau dashboard—visualizing the entire CFR business flow with real-time KPIs and rolling it out to the company’s top 20 insurance clients.

## Standardized Tableau dashboard elements—including design, color-coding, info icons, and text formatting—across 50+ reporting dashboards, enhancing visual consistency and improving report usability and stakeholder confidence organization-wide.

## Applied A/B testing methodology to optimize user experience for anomaly detection email notifications; tested tabular versus bullet-point designs and drove a 90% user preference for bullet points, leading to improved stakeholder engagement with insights.

## Elevated data accessibility by showcasing the AI Data Assist tool to 100+ employees, enabling non-technical users to perform instant, no-code analytics and earning leadership praise for democratizing data insights across the organization.

## Capgemini, Hyderabad, TS — Consulting Analyst *Sept 2020 – Jun 2023*

## Saved $30K annually by analyzing insurance claims data with SQL and identifying root causes of faulty reimbursements, driving system enhancements.

## Increased operational efficiency by automating ETL workflows in Python and SQL, streamlining periodic revisions of car rental business criteria and saving 25 hours per month for the ops team.

## Optimized sprint execution by developing interactive Power BI dashboards and Excel reports to track team performance—eliminating sprint spillovers within 3 months and enabling data-driven sprint planning.

# PROJECTS

**Ad Campaign Performance Dashboard | Looker Studio** *May 2025*

## Developed an interactive dashboard analyzing 1M+ impressions and 9K+ clicks, delivering key insights on campaign and ad set performance that helped optimize marketing spend and improve ROI.

**Customer Churn Analysis | Power BI** *May 2025*

## Built an interactive Power BI dashboard to analyze churn behavior across 7+ customer segments for Databel, uncovering key drivers like plan mismatch, contract type, and age - identifying seniors (38% churn) and low-data unlimited plan users as the highest-risk groups.

**Forecasting Bike Share Demand | R Studio**   *Jan 2025*

## Developed a VAR model, with an R² of 0.30 on unseen data, to uncover bike rental demand patterns, revealing peak usage during commuting hours and summer seasons and enabling data-driven optimization of bike availability in urban areas.

## Built an automated data pipeline for real-time bike rental ingestion and forecast storage using MySQL and Airflow, reducing manual data handling and ensuring timely availability of forecasts for decision-making and dashboard updates.

**Emotion Detection in Tweets | NLP**   *Jan 2025*

## Developed and benchmarked multi-label emotion detection models (RoBERTa-Base, Gemma 2.2B, Llama Instruction), achieving a top F1 macro score of 0.47 for accurate classification of emotions in tweets.

## Leveraged TensorFlow with A100 GPU on Google Colab to reduce model training runtime from multiple hours to under 30 minutes, significantly accelerating experimentation and delivery.

**Anomaly Detection in Aviation Industry | Python**  *Jan 2025*

## Developed an automated anomaly detection system using Prophet to monitor UK flight numbers, achieving a MAPE of 5.08% and enabling timely identification of operational disruptions.

## Built a scalable ETL pipeline using Python and Airflow to ingest daily flight data from MySQL and implemented a real-time alert system, reducing anomaly response time by 80% and ensuring timely interventions for operational disruptions.

**Online Shopper’s Purchasing Prediction | Python**  *Dec 2024*

## Compared Logistic, SVM, and Random Forest models based on Recall to identify the best model for classifying online shoppers’ purchasing intent and fine-tuned the model using SMOTE to achieve a 93% accuracy.

**Fleet Risk Analytics | Hadoop & Tableau**  *Nov 2024*

## Processed 10M+ telematics and fleet records using Hadoop, Hive, and Pig to identify high-risk driver behavior and enable targeted safety interventions—reducing accident rates by 20%.

## Enabled real-time risk monitoring with Tableau dashboards powered by Big Data insights, improving fleet decision-making speed and operational efficiency across 50+ locations.

**Second-Hand Cars Market Analysis | Tableau**  *Oct 2024*

## Designed a Tableau dashboard to analyze 4K+ second-hand cars to identify how factors like mileage, model year, and model availability affect the car’s market price.

# EDUCATION

**The University of Texas at Dallas** Aug 2023 – May 2025

*Master of Science in Business Analytics and Artificial Intelligence (3.94 GPA)*

## Awards: 2x Dean’s Excellence Scholar. Awarded to the top 5% of students for outstanding academic performance.

## Relevant Coursework: Business Analytics with R, Big Data, Statistics, Predictive Analytics, Machine Learning, Time Series Analysis

**BITS Pilani** Aug 2016 – Sept 2020

*Bachelor of Engineering, Manufacturing Engineering (3.0 GPA)*

# LEADERSHIP EXPERIENCE AND HACKATHONS

**Winner, Alteryx SparkED Hackathon** *Mar 2024*

## Competed against 20+ university teams and secured 1st place ($16,000 prize) by leveraging Alteryx and Tableau to analyze Texas demographic, economic, and infrastructure data, uncovering key insights on population trends and real estate.

## Mentor, Business Analytics Leadership Council (BALC) *Aug 2023 – May 2024*

## Mentored incoming 10+ Spring 2024 Business Analytics cohort students by providing coursework and career strategies guidance.

## Helped students enhance their job search approach via weekly sessions, leading to improved confidence in networking and recruitment success.