

# Vineet Reddy Saddi

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## EDUCATION

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### University of Massachusetts Amherst, USA

Master of Science in Business Analytics

Aug 2024 – Dec 2026

### Malla Reddy Institute of Technology and Science, India

B.Tech in Computer Science and Engineering

Dec 2020 – May 2024

## Skills

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**Programming Languages:** Python, SQL, R, JavaScript, HTML/CSS

**Data Visualization Tools:** Tableau, Excel (Advanced: Pivot Tables, Macros), Google Data Studio

**Databases & Data Warehousing:** Snowflake, MySQL, Google BigQuery

**Libraries & Frameworks:** Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn, XGBoost, TensorFlow

**Other Tools:** Git/GitHub, Jupyter Notebook, VS Code, Alteryx

## PROJECTS

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### Airbnb Demand and Availability Forecasting – Amsterdam

- Forecasted short-term rental demand using **5M+ calendar records** and **15,000+ listings** in Amsterdam, uncovering **seasonal, property-specific, and location-driven trends** to optimize occupancy strategies.
- Engineered **10+ features** including time variables (day-of-week, holidays) and host metrics (listing age, cancellation rate), enhancing model accuracy and enabling **A/B testing** for pricing strategies.
- Built and validated **Random Forest** and **Logistic Regression** models, achieving **91% accuracy, 94% F1-score, and 0.92 ROC-AUC** for accurate booking prediction and demand classification.
- Delivered insights through **dashboards** and **automated reports** using **Matplotlib, Seaborn, and Pandas**, improving stakeholder engagement and supporting data-driven decisions.

### Amazon Product Ratings and Reviews Analysis

- Analyzed **1M+ product reviews** with advanced **SQL** in **Snowflake** to uncover sentiment trends and identify factors influencing customer satisfaction.
- Designed interactive dashboards in **Tableau** to visualize ratings distributions and review trends, enabling data-driven product strategy.
- Conducted **text preprocessing, EDA**, and statistical analysis to support hypothesis testing and product experiment design.

### Video Game Sales Analysis

- Developed a data pipeline using **Pandas** and **NumPy** to process and normalize **16,598 records**, addressing missing values and standardizing platform names to ensure consistency and reliability for downstream analysis.
- Executed **exploratory data analysis (EDA)**, generating **10+ visualizations** with **Matplotlib** and **Seaborn** to uncover patterns in sales distribution, platform success rates, and regional performance variations.
- Implemented optimized data filtering, grouping, and aggregation techniques, improving processing efficiency by **35%** and reducing execution time by **40%**, enabling faster iteration cycles and real-time data exploration during analysis.

### U.S. State Ranking Dashboard – Excel-Based DSS

- Built an Excel-based DSS dashboard ranking top 15 U.S. states using Pivot Tables and Macros, analyzing \$6,263B GDP, 76M+ population, and 2.33% job growth rate across key economic indicators.
- Automated multi-dimensional data analysis and visualization of metrics like average income (\$44,562), migration rate (0.45%), and internet speeds using dynamic Pivot Charts and interactive slicers.
- Designed a fully interactive dashboard enabling real-time exploration of poverty rates, crime rates, graduation rates, and air quality index, improving insights for optimal living and working decisions.

## CERTIFICATIONS

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### Machine Learning Specialization – Stanford University

Gained hands-on experience in machine learning, including neural networks, decision trees, and evaluation.

### Google Advanced Data Analytics – Google (Coursera)

Developed skills in data analysis, statistical modeling, and predictive analytics using Python, SQL, Tableau.

### Data Analysis with Python: Zero to Pandas – Jovian

Completed end-to-end data analysis and visualization projects using Pandas, Matplotlib, and Seaborn.