VIGNESHWAR RAVI RAO

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Education

Indiana University Indianapolis   **Indianapolis, USA**
Master of Science, Applied Data Science: GPA: 4 / 4   Expected *Aug 2026*
Coursework: Machine Learning, Deep Learning, Data Science Programming

College of Engineering Guindy, Anna University   **Chennai, India**
Bachelor of Engineering, Mechanical Engineering: GPA: 3.2 / 4   *Apr 2020*
Coursework: Differential Calculus, Matrices

Experience

Tata Consultancy Services Ltd.   **Chennai, India**
Data Analyst   *May 2021 - Jul 2024*
- **Enhanced customer database accuracy by 98%** by scraping 15,000+ sales leads using **Python**, cleaning, and integrating them into the master database.
- **Saved 120+ hours** of manual effort by developing a **Python-Pandas** tool to automate customer data integration during mergers and acquisitions.
- Increased team productivity by 35% by automating 80% of repetitive quality checks and reporting tasks using **Python** and **Excel VBA**.
- Improved marketing campaign efficiency by 25% by identifying 10,000+ active and inactive customers through **SQL** analysis in **Snowflake**.
- Accelerated pricing alignment process by 50% by building an Excel dashboard with advanced formulas to compare product prices post-merger.

BOM Analyst and Excel VBA Developer   *Oct 2020 - Apr 2021*
- **Decreased manual effort by 85% and saved $9,000** by automating the extraction and consolidation of BOM data using **Excel VBA.**
- **Enhanced reporting speed by 70%** by developing custom **Excel VBA** macros to automate weekly report generation.
- **Ensured 100% accuracy in BOM** data by collaborating with design engineers to clean and validate BOMs for two car models, eliminating errors and discrepancies.

Projects

Used Car Price Prediction | Linear Regression, R - Github
- Built a **linear regression** model in **R** to predict used car prices based on key attributes like brand, age, and ownership history.
- Automated the price assessment process, enabling accurate and data-driven pricing decisions for used car listings.

E-commerce Sales Analysis | SQL, BigQuery - Github
- Analyzed Target's e-commerce sales data using **SQL** in **BigQuery** to identify customer distribution, order trends, and payment behavior.
- Generated insights on sales growth, seasonal trends, freight costs, and delivery performance, enabling data-driven business decisions.

Technical Skills

Programming Languages: Python, MySQL, R Programming, Excel VBA
Libraries: Numpy, Pandas, Selenium web-driver, BeautifulSoup, Regex, Scikit-learn, PyTorch, Flask
Technologies: Snowflake, BigQuery, Tableau, Github, AWS, Docker
Machine Learning: Regression, Classification, Feature Engineering
Hypothesis Testing: A/B Test, Chi-Squared test, ANOVA, Z-test, Correlation test

Awards

Best Team Award - Recognized for outstanding contributions during mergers and acquisitions, and streamlining the customer data.
On the Spot Award - Awarded for improving team efficiency by developing automation tools for tasks such as data entry and quality checks.

Leadership / Extracurricular

Tata Consultancy Services Ltd.   **Chennai, India**
Instructor   *Nov 2023 - Dec 2023*
- Taught Python to trainees through training sessions for a period of 2 months.

Data Science and Machine Learning Club   **Indianapolis, USA**
Technical Content Lead   *Oct 2024 - present*
- Delivered technical presentations to our university students.
- Worked closely with other committee members to host events such as presentations, networking events.