

VIGNESHWAR RAVI RAO

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Education

Indiana University Indianapolis
Master of Science in Applied Data Science
GPA: 4.0/4.0

Indianapolis, USA
May 2026

Experience

Tata Consultancy Services Ltd.
Data Analyst

Chennai, India
May 2021 – Jul 2024

- Enhanced customer database accuracy by 98% by web scraping (**Python, Selenium, BeautifulSoup**) 15,000+ sales leads and integrating them into the master database.
- Saved 150+ hours of manual effort by developing a tool using **Pandas, Regex** to automate customer data integration and increased team productivity by 35% by automating 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.
- Taught Python programming to 8 trainees, including managers and leads, through structured hands-on sessions over 2 months, enhancing their practical coding proficiency.

BOM Analyst and Excel VBA Developer

Oct 2020 – Apr 2021

- Decreased manual effort by 85%, saved \$9,000, and enhanced reporting speed by 70% by developing **Excel VBA** macros to automate BOM data extraction, consolidation, and weekly report generation.
- Ensured 100% accuracy in BOM data by collaborating with design engineers to clean and validate BOMs for two car models.

Projects

Used Car Price Prediction | Github

Nov 2024

- Built a **linear regression** model in **R** to predict used car prices based on key features.

E-commerce Sales Analysis | Github

Sep 2024

- Analyzed Target's e-commerce sales data using **SQL** in **BigQuery** to identify customer distribution, order trends, and payment behavior.

Technical Skills

Programming Languages: Python, MySQL, R Programming, Excel VBA

Libraries: Numpy, Pandas, Selenium WebDriver, 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 - For outstanding contributions during mergers & acquisitions, streamlining customer data.

On the Spot Award - For improving team efficiency by developing automation tools for data entry and quality checks.

Leadership & Extracurricular

Data Science and Machine Learning Club
Event Management Lead

Indianapolis, USA
Oct 2024 – Present

- Delivered technical presentations to university students.
- Worked closely with committee members to host events such as presentations and networking events.