

Thanmaya Sri Sigireddi

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EDUCATION

State University of New York at Buffalo,
Masters in Engineering Science Data Science

Jan 2024 – May 2025

VNR Vignana Jyothi Institute of Technology and Engineering,
Bachelors of Technology in Electrical and Electronics Engineering

Jun 2019 – May 2023

PROFESSIONAL EXPERIENCE

Data Analyst, Nucleus Business Solutions

May 2023 – Dec 2023

- Developed predictive models using **scikit-learn** to forecast employee attrition and hiring demands, improving planning accuracy for HR teams.
- Engineered **ETL pipelines** with **PySpark** and **SQL** to automate the integration of recruitment, payroll, and performance data across systems.
- Created dynamic dashboards using **Power BI** and **Tableau** to monitor HR KPIs, enabling leadership to track hiring efficiency, employee engagement, and retention metrics in real time.

Data Analyst Intern, Nucleus Business Solutions

Oct 2022 – Apr 2023

- Utilized **Python (Pandas, NumPy)** and **SQL** to clean, process, and analyze HR datasets, uncovering key insights into recruitment funnel efficiency, sourcing effectiveness, and patterns contributing to employee attrition.
- Built **Power BI** dashboards to visualize time-to-hire, sourcing effectiveness, and candidate pipeline metrics.
- Assisted in developing **exploratory data analysis** reports and **statistical** summaries to support data-driven HR decision-making, talent acquisition strategies, and workforce planning initiatives.

PROJECTS

Detox Dial- AI-Powered Digital Wellness App

- Developed a **multi-modal AI intervention system** to help users break digital addiction, integrating GPT-based chat, AI driven phone calls, and behavioral analytics.
- Leveraged **data analytics** and **machine learning** to monitor user behavior and deliver personalized detox recommendations, boosting user engagement.
- Utilized cross-platform development and modern **UI/UX** design principles to create an intuitive interface that significantly enhanced the overall user experience.

Design & Implementation of Relational Database for Laptop Specifications

- Engineered a BCNF-normalized **PostgreSQL** database for 5,000+ laptop records, ensuring efficient querying, data integrity, and performance optimization.
- Implemented **advanced SQL** techniques, including **stored procedures**, **indexing**, and **CTEs**, to accelerate analytical queries for market trend prediction.
- Built **ETL** pipelines using **Pandas** and **SQLAlchemy**, enabling seamless data ingestion, transformation, and structured storage for real-time analytics.

Clustering of Cryptocurrency Price Movements

- Analyzed historical **cryptocurrency** price data using Principal Component Analysis (**PCA**) for dimensionality reduction and **K-Means & Hierarchical Clustering** for segmentation.
- Developed an interactive visualization dashboard in **R (Shiny)** to explore volatility, trends, and cluster relationships, aiding investors and financial analysts.
- Implemented custom **statistical feature engineering**, incorporating moving averages, correlation analysis, and volatility metrics for improved cluster interpretability.

SKILLS

- Programming & Scripting:** Python, R, C, SQL (Advanced), HTML, CSS
- Big Data & Databases:** PostgreSQL, MySQL, Google BigQuery, AWS (S3, Lambda, EC2, Athena), Snowflake
- Frameworks/Libraries:** Machine Learning, Deep Learning, NLP, Pandas, Numpy, TensorFlow, PyTorch, Scikit-learn
- Visualization & Tools:** Tableau, Power BI, Advanced Excel, UI/UX Design, Plotly, Streamlit

CERTIFICATES

- Data Science Foundations - Great Learning Academy 📄
- Python - Excel Solutions 📄
- AI-Integrated Application - AI for Good Hackathon 📄
- Data Science internship - Plasmid 📄
- SQL - Excel Solutions 📄
- Microsoft Power Bi - Excel Solutions 📄