Thanmaya Sri Sigireddi

EDUCATION

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

Jan 2024 - May 2025

Relevant Coursework: Statistical Data Mining, Machine Learning, Pattern Recognition, Probability and Data Analysis, Database Management System, Numerical Methods.

VNR Vignana Jyothi Institute of Technology and Engineering,

Jun 2019 - May 2023

Bachelors of Technology in Electrical and Electronics Engineering

Relevant Coursework: Machine Learning, Deep Learning, Aritificial Intelligence, Data Structures and Algorithms, OOPS Concepts, Data Structures, C Programming.

PROFESSIONAL EXPERIENCE

Data Analyst Intern, Perfect Job Accord

Dec 2022 - Dec 2023

- Developed and optimized **big data pipelines** using **Linux**, and **Spark**, improving data processing efficiency by 30%.
- Built and deployed **machine learning models** for predictive analytics, including deep learning, time-series forecasting, and unsupervised learning, leveraging **Python, PySpark,** and **TensorFlow**.
- Led data-driven decision-making by designing ETL workflows, interactive dashboards (**Power BI, Tableau**), and **statistical analysis**, enabling strategic insights for business growth.

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, HTML, CSS
- Big Data & Databases: Hive, Spark, PostgreSQL, MySQL
- Frameworks/Libraries: Machine Learning, Deep Learning, NLP, Pandas, Numpy, TensorFlow, PySpark
- Visualization & Tools: Tableau, Power BI, Excel, UI/UX Design

CERTIFICATES

- Data Science Foundations Great Learning Academy &
- AI-integrated application AI for Good Hackathon &
- SQL Excel Solutions ∂

- Data Science internship Plasmid ℰ
- Python Excel Solutions ∅
- Microsoft Power Bi Excel Solutions &