## Giri Manohar Vemula

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#### **EDUCATION**

Northeastern University, Boston

May 2024

Master of Science in Data Analytical Engineering

Coursework: Database Management, Computation and Visualization, Statistical Learning

Vellore Institute of Technology, India

Jun 2022

Bachelor of Technology in Computer Science and Engineering

Coursework: R and Python Programming, Machine Learning, Optimization Techniques, Artificial Intelligence

### **SKILLS**

Programming Languages: R (tidyr, readr, caret), Python (Pandas, NumPy, Tensor-flow, Seaborn), Java

**Data Visualization Tools**: Tableau, Flourish, Datawrapper, MS Excel, Power-BI

**Data Engineer Tools** : SQL (MySQL, PostgreSQL), NoSQL (MongoDB, Neo4j), AWS, Snowflake **Specializations** : ETL, Data Analysis, Data Modelling, Data Mining, Statistics, Data Wrangling

Soft Skills : Story Telling, Problem-Solving, Collaboration, Critical Thinking

### PROFESSIONAL EXPERIENCE

Shiash Info Solutions, Chennai, India

Jan 2022 - Jun 2022

Python Web Developer Intern

- Developed Smart Grid web page, boosting consumer engagement by 30% and enabled seamless power management communication via database integration and K-fold algorithm validation
- Utilized Django to design a scalable backend application, ensuring accurate data storage, retrieval, and report generation for streamlined decision-making
- Coordinated interchange of reports, reducing 25% data processing time and enabling seamless communication between power management and users
- Tracked KPIs and yield 40% improve in system efficiency and 20% downtime reduction

## **ACADEMIC PROJECTS**

Covid Analysis using Amazon Web Services [AWS S3, Glue, Redshift, Athena]

Jan 2024

- Developed data warehouse on AWS Redshift by integrating dataset of 10,000 entries
- Utilized Amazon S3 for data storage and executed a Glue crawler for data structuring and performed ETL processes to refine data quality and ensure efficient usability
- Employed Athena for querying CSV datasets and seamlessly migrated pertinent data to the Redshift warehouse, facilitating comprehensive analytical processes

Personality Prediction Test, [Supervised ML Algorithms, Data Cleaning, Tableau]

Apr 2023

- Explored personality prediction through machine learning, training, and testing diverse models like Decision Tree, Neural Network, KNN, logistic regression, and PCA to identify the most effective approach
- Ensured data quality and accuracy by cleaning unstructured data, enabling precise analysis, and conducted comprehensive. Error Analysis, Lift Charts, and ROC curves for model accuracy and performance
- Leveraged Tableau to create highly interactive dashboards, unveiling valuable insights on participant demographics and behavior, providing concise visualizations for analysis

**Human Activity Recognition**, [Time Series Complexity Analysis, R]

Dec 2022

- Conducted time series analysis on 15 participants data, focusing on activities like walking, running, and climbing to predict fall incidents using NVG and Horizontal Visibility Graph HVG methods
- Created scatter plot visualizations and computed essential network topology metrics, including average degree, network diameter, and path length, to uncover potential patterns or correlations within the data

# **CERTIFICATES/ EXTRACURRICULAR ACTIVITIES**

Business Analytics with Excel, Simplilearn

Data Mining Hackathon (US Offense Type), Special Recognition in Hackathon Winners

Certificate of Merit, VIT-AP Engineering Clinics Projects