Venkata Surendra Mekala

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EXECUTIVE SUMMARY

Aspiring Graduate Student in Data Science with practical expertise in data analytics, deep learning, and machine learning. Adept with Python, PowerBI, and AWS technologies, having led machine vision, NLP, and predictive modeling projects in the past. Strong problem-solving skills and technical expertise drive innovative solutions to real-world challenges.

EDUCATION CREDENTIAL

University of New Haven — West Haven, CT
Master of Science in Data Science — **Dec 2024**
Academic Honours/Awards: Dean's Scholarship — GPA: 3.5/4

Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology — Chennai, India
Bachelor of Technology in Electronics and Communication Engineering — **May 2023**
Academic Honours/Awards: Merit Scholarship — GPA: 8.12/10

SKILLS

- **Programming Languages**: Python, SQL, Java.
- **AWS**: EMR, EC2, Athena, Glue, Lambda, Apache Kafka, Hadoop, Spark, Redshift, Dynamo DB.
- **Databases**: MY SQL, Microsoft SQL Server, Mongo DB(no SQL).
- **Libraries**: Pandas, Numpy, Scikit -Learn, PyTorch, TensorFlow.
- **Reporting & Visualization**: Power Bi, Tableau.
- **Methodologies**: Agile, Waterfall, Scrum.
- **Project Management Tools:** Jira, Bit Bucket, Confluence.
- **Data Warehousing:** Snowflake.

PROFESSIONAL EXPERIENCE

Atrisol Technologies Pvt Ltd. — **Bangalore, India**
Intern Trainee — **2021 - 2022**

- Performed statistical analysis and exploratory data analysis (EDA) to find patterns and insights.
- Excel and SQL were used to assist senior analysts with data gathering, cleaning, and visualization.
- Assisted top analysts with the collecting, cleaning, and visualization of data using SQL and Excel.
- Created and put into use a dashboard using Power BI that allows for data-driven decision-making and offers real-time insights into important performance metrics.
- Using PowerBI Desktop, I created and published interactive reports and dashboards and converted Excel's Boundary Tables to Power BI with improved graphs and visuals for business comprehension and enhancement.
- Used SQL and Python to clean, convert, and manipulate data, which led to a 15% decrease in processing time.

2022 - 2023

- Using AWS technologies, I maintained strong seven+ data pipelines to guarantee effective data handling and integrity for Amazon internal projects while improving my data analysis skills.
- Performed in-depth analysis of sales data to find potential for upselling and cross-selling, resulting in a 15% monthly revenue boost.

- Working with databases such as MS SQL Server and Access, including locking, transactions, indexes, shading, replication, and schema design.
- Supported data-driven choices and helped senior team members with data analysis, data mining, and data cleaning duties to ensure a successful project that produced significant outcomes for customers.
- Decision trees, random forests, naïve bayes, logistic regression, cluster analysis, and neural networks were used to create prediction models.

Millenium Intech Pvt Ltd. **Chennai, India**
Intern **2023 - 2024**

- Processed large datasets to uncover key insights and generated clear and impactful visualizations using tools like Python, and Power BI to present data in an accessible and visually engaging format.
- Developed visualizations using Power BI to make complex shortage analysis accessible to stakeholders.
- Engineered comprehensive Power BI visualizations to clearly convey complex data trends, enhancing stakeholder understanding by 25% and facilitating a 10% uptick in project approval rates.
- Maintained 98% data pipeline stability, reducing discrepancies by 20% over one year.
- Collaborated with a diverse team of 5+ data engineers and analysts to develop and implement 10+ data visualization solutions.
- Trained team members on Power BI best practices, increasing overall team efficiency in data visualization and reporting by 20%.
- Supported cross-functional teams by delivering ad-hoc reports and analyses, enabling faster decision-making and reducing turnaround time by 20%.
- Conducted detailed data audits, identifying inconsistencies that improved data integrity by 15%, resulting in more accurate business insights.
- Proven ability to present complex data insights in clear, accessible reports and presentations for a broad audience.

PROJECTS

University of New Haven West Haven, CT
Capstone Project - Edu-Predict MVP Tool **Aug 2024 – Dec 2024**

- The **Edu-Predict MVP Tool** is a initiative that uses data analytics using PowerBI and machine learning to assist forecast educational results.
- The tool seeks to provide light on learning patterns, academic trends, and student performance.
- The **MVP (Minimum Viable Product)** version would concentrate on providing impactful features that are lightweight and easy to use.
- This technology lets educators intervene early and customize their techniques to meet the needs of each individual student by detecting at-risk individuals and providing actionable information.

University of New Haven West Haven, CT
Automated Parking Status Tracker using Deep Learning **Aug 2024 – Dec 2024**

- The ultimate objective of the Automated Parking Status Tracker using Deep Learning project is to use deep learning techniques to automate the process of real-time parking spot monitoring.
- The system analyzes video or photos taken by cameras placed across parking lots to use computer vision models to track the occupancy status of parking places (i.e., whether they are occupied or free).
- It provides real-time status information, boosts parking effectiveness, and makes smart parking systems more user-friendly overall.

University of New Haven West Haven, CT

Restaurant Menu Optimization using NLP **Aug 2024 – Dec 2024**

- This project aimed at improving the efficiency and appearance of restaurant menus through the use of Natural Language Processing (NLP) methods.
- Optimizing menu content to improve customer experience, increase sales, and assist restaurants in making data-driven decisions about their offers is the aim of this initiative.
- The system can provide recommendations for enhancements to menu descriptions, price, classification, and general organization by examining the language, customer reviews, and sales statistics.

University of New Haven West Haven, CT

Customer Attrition Analysis **Jan 2024 – May 2024**

- The intent of customer attrition analysis is to identify at-risk consumers, comprehend the reasons behind their discontinuation of usage of a product or service, and create retention tactics.
- Constructing prediction models with statistical and machine learning methods to identify which consumers are most likely to leave.
- Delivering strategies and insights that are actionable to lower attrition.

University of New Haven West Haven, CT

Baroque Chess **Aug 2023 – Dec 2023**

- Designing physical or digital sets of Baroque Chess, ensuring clarity and ease of use.
- The project intends to investigate the special dynamics of the game, produce player materials, and maybe build digital versions for wider distribution.

VelTech University Chennai, India

Multi-hop routing for IoT Communication **Dec 2022 – May 2023**

- Designed and created a Multi-hop routing protocol tailored for IoT environments.
- This multi-hop routing protocol helps to defend against frequent attacks like replay, data manipulation, and eavesdropping, protocol incorporates strong security measures.
- The suggested secure multi-hop routing protocol greatly improves both the security and performance of IoT communications.

RELAVENT COURSEWORK

- Artificial Intelligence
- Data Mining
- Data Analysis
- Machine Learning
- Distributed Engineering
- Power BI
- Deep Learning
- Scalable Engineering
- Natural Language Processing