SAI DEEPIKA ASANDI

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EDUCATION

Master of Science in Data analytics Sept 2023 - May 2025
Tufts University; GPA: 3.92/4.00 *Boston, MA*
Coursework: Large Scale Parallel Data Processing, Building Scalable Distributed Systems, Algorithms, Programming Design Paradigms, Database Management Systems, Data Mining Techniques, Visualization tools.

Bachelor of Engineering in Electrical and Communication Engineering Aug 2019 – May 2023
Amrita Vishwa Vidyapeetham, Amritapuri; CGPA: 8.72/10 *Kochi, India*

WORK EXPERIENCE

Data analytics Intern July 2024 - Present
MBTA *Boston, MA*
- Streamlined data migration processes using **PySpark**, resulting in a 20% reduction in processing time for **ridership data**.
- Designed and maintained **Azure** pipelines to ensure efficient and uninterrupted data flow across platforms, enhancing system reliability and minimizing downtime.
- Developed and optimized **SQL queries** in SQL Server Management Studio, creating interactive **Tableau** dashboards to visualize key ridership metrics and support data-driven decision-making.

Teaching assistant, Introduction to data analytics Sept 2024 - Present
Tufts University *Boston, MA*
- Led lab sessions on **Python**, machine learning, Tableau, and data cleaning, equipping students with foundational analytics skills and providing personalized support during office hours
- Assisted the professor and introduced **machine learning basics**, helping students apply analytical techniques to solve practical problems.

Research Assistant, Dr. Shan Jiang Jan 2024 - May 2024
Tufts University *Boston, MA*
- Developed a project to differentiate modes of transportation using mobile data, ensuring data quality through data cleaning processes
- Applied **machine learning techniques** to analyze and interpret transportation data for more accurate insights.

Business Development Associate Mar 2023 – May 2023
UrbanClap Technologies *Hyderabad, India*
- Demonstrated expertise in managing **consumer data** and executing **SQL queries** for data extraction and analysis, ensuring organized and efficient workflows.
- Oversaw the **partner onboarding process**, conducting evaluations to enhance the credibility and reliability of partnerships.

SKILLS

Programming Languages: Python, C, R Language, SQL, C++, Java.

Design and Modeling Tools: Power Bi, Tableau, Machine Learning, Snowflake, MS Excel, MATLAB, ArcGISPro, ROS, Arduino IDE, VLSI Design, IOT, Google Doc, Google Slides, Azure, AWS.

Libraries: NumPy, Pandas, Matplotlib, TensorFlow, ggplot2, Scikit-learn, PyTorch, Keras, SpaCy, NLTK, pgAdmin4.

PROJECTS

Ridership Data Analysis Tool *[Technologies: SQL, Python, Tableau]*
Collected and analyzed ridership data from multiple sources to compare trends before and after the introduction of credit card payments. Used SQL for data extraction, Python for cleaning, and Tableau to visualize insights, identifying key trends such as changes in ridership patterns.

Transportation Mode Differentiation Using Mobile Data *[Technologies: Python, Clustering, Data Cleaning]*
Developed a project to classify transportation modes by analyzing mobile data. Ensured data quality through data cleaning processes and applied machine learning techniques, with a primary focus on clustering, to differentiate between modes such as walking, cycling, and public transit.

Voter ID Card and Fingerprint-Based E-Voting System *[Technologies: Python, Biometric Authentication, Database Management]*
Developed a secure e-voting system using voter ID cards and fingerprint authentication, integrated with a centralized database to enhance voting accuracy and security. The project was published under IEEE.

ACHIEVEMENTS

Collaborated with students from all over the world to develop and simulate robots in Unity, securing 5th and 4th positions in the global IDC Robocon 2021 & 2022 competitions. Demonstrated leadership and technical expertise while adhering to competition guidelines during pandemic constraints.