Pavani Samala

Washington DC 20032 | 484-631-5616 | psamala54@gwmail.gwu.edu | LinkedIn | GitHub

EDUCATION

The George Washington University, Washington, DC — Anticipated May 2023
Master of Science, Data Science (GPA: 4.0)
Relevant Coursework: Machine Learning I, Data Mining, Data Warehousing, Data Science

Pennsylvania State University, University Park, PA — May 2021
Bachelor of Science, Engineering Science
Minor, Engineering Mechanics
Relevant Coursework: Computer Methods in Engineering Science, Analysis in Engineering Science

TECHNICAL SKILLS AND CERTIFICATIONS

- **Programming Languages**: Python, R, SQL, MongoDB, Neo4j
- **Tools**: MATLAB, GitHub, HTML, Word, Excel
- **Certifications**: LinkedIn Learning: Tableau for Data Scientists, Master Microsoft Power BI

TECHNICAL PROJECTS

Wine Quality Prediction Using Machine Learning | Python 2022
- Created a pipeline to preprocess raw dataset, find optimal learning rate through hyperparameter tuning, and determine best performing model. Tools: TensorFlow, matplotlib, seaborn

Predicted Airfare Prices Using Economy and Business Class Airline Data | Python 2022
- Visualized airline data and coded predictive models to predict airfare costs and help customers create a traveling budget. Tools: NumPy, pandas, matplotlib, Scikit-learn, seaborn

Predicted Song Genres from Spotify API Data | R 2022
- Predicted the genres of songs by creating different classification models which can be utilized to expand an artist's audience. Tools: dpylr, class, rpart.plot, rattle

Analysis of Airbnb Prices in New York City Using Airbnb Data | R 2022
- Identified profitable features to maximize Airbnb's revenue by conducting explanatory data analysis on host, location, and customer data. Tools: ggplot2, corrplot, ggmap

WORK EXPERIENCE

D.L. Howell & Associates, West Chester, PA | *Civil Designer* May 2021-Jan 2022
- Successfully increased number of residential developments for a multi-million-dollar project by identifying business process improvement opportunities
- Developed optimal stormwater management solutions by collecting and analyzing topography data and calculating terrain slopes
- Ensured professional engineers had access to data and knowledge during decision-making processes

Penn State Ultrasound Lab, University Park, PA | *Undergraduate Researcher* Sept 2019-May 2021
- Calculated mean and standard deviation values for 12 sets of ultrasonic data by writing MATLAB code with fellow lab members
- Utilized visual and statistical modeling to translate ultrasonic data into valuable insights
- Identified flaws in six titanium alloy samples by developing a systemized data collection process
- Effectively communicated results to both technical and non-technical audiences; created data visuals using graphs, coded labels, and keys and wrote report that summarized the research and key findings

LEADERSHIP

Data Science Association, Washington, DC | *Cabinet Member* July 2022-Present
- Assisted president and vice president with restructuring and reshaping organization with new goals

Penn State Infusion, University, PA | *Executive Board Member* Oct 2018-May 2021
- Oversaw logistics and operations of a national Bollywood dance competition for nine teams