Vishwesh Srinivasan

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EDUCATION

Tufts University, MA, USA | Master of Science in Data Analytics | GPA: 3.96/4.00

Sep 2022 - May 2024

Coursework: Machine Learning, Big Data, Data Science for Urban Sustainability, Database Design & SQL, Adv. Statistics I & II

Teaching Assistant: Foundation of Data Analytics (DATA200) & Introduction to Data Analytics (DATA100)

National Institute of Technology Warangal, India | B. Tech in Mechanical Engineering

Aug 2016 – Aug 2020

EXPERIENCE

Paragon Corporation, MA, USA | Database Programmer

Jan 2024 – May 2024; Jan 2025 - Present

Increasing the efficiency of clients' payroll systems by streamlining the maintenance of their PostgreSQL databases.

Success Academy Charter Schools, NY, USA | Data Associate

July 2024 – Jan 2025

• Reduced feedback turnaround time by 85%, enabling quicker teaching adjustments and enhancing student outcomes by streamlining academic data management and delivering daily assessment reports in Google Sheets to leadership.

Data Intensive Studies Center, Tufts University, MA, USA | Research Intern (Poster)

Jan 2024 – May 2024

 Developed a novel approach to detect rare tumor cell clusters in blood by training a random forest classifier using a correlation-based feature-engineered light scattering data (Accuracy, Precision, TPR, TNR: ~90%).

JPMorgan Chase & Co., DE, USA | Applied AI ML Sr. Associate, Credit Risk Modeling

Jun 2023 – Sep 2023

- Reduced the documentation and approval time for small business customers (below \$250k exposure) by 30% (est.) by reducing required data points to only the primary guarantor's indicators, thereby improving customer experience.
- Formulated the above strategy by building and analyzing the performance of two XGBoost classifiers on various data segments using PySpark on AWS, with and without additional guarantor indicators.

Data Analytics Department, Tufts University, MA, USA | Graduate Research Assistant (Website)

Jan 2023 – Apr 2023

 Automated 80% of the name entity tagging process of D'Arcy Thompson's Glossary of Greek Birds book (second edition) to make it accessible to the general audience using XML text processing and NLP techniques.

Citigroup, India | Software Developer, Personal Banking & Wealth Management Technology

Aug 2020 – Jul 2022

- Increased the efficiency of personal loan processing by simplifying the workflows in the core banking systems.
- Eliminated the manual processing of reports with an automated system to convert them to dashboards using VBA.

Language Technologies Research Center, IIIT Hyderabad, India | Research Intern (Repository)

May 2019 – Jul 2019

Reduced the perplexity by 16% compared to the SOTA sentence simplification model by training a Seq2Seq model
using the WIKISPLIT dataset with reward (BLEU score) augmented maximum likelihood objective function.

Reliance Jio Infocomm Limited, India | Machine Learning Intern

May 2018 – Jul 2018

• Improved the search efficiency of an internal platform used for resolving network coverage issues by building related search (NCD algorithm), auto-complete (N-Grams), and recommendation (TF-IDF & cosine similarity) features.

SPI Cinemas Private Limited, India | Data Science Intern

Nov 2017 - Dec 2017

• Reduced the turnover rate by 30% (est.) by pioneering a data-driven hiring strategy and developing a random forest classifier (87% accuracy) to predict the likelihood of frontline staff leaving within the first three months.

PROJECTS

Relationship between air pollution and walkability index in Greater Boston Region (Repository)

• Found a positive correlation between exposure to air pollution and the walkability index by analyzing the visualizations (using GeoPandas) and the results of spatial regression models implemented using PySAL.

Gentrification study of New York and Los Angeles metropolitan areas (Repository)

• Implemented classification algorithms with SMOTE techniques (to handle imbalanced data) to predict the likelihood of a census tract getting gentrified between 2000 and 2010 using the Neighborhood Change Database.

TECHNICAL SKILLS

Competencies: Linear & Logistic Regression, Tree-Based Methods, Ensemble Learning, Neural Networks, CNNs, Text Processing, Word Embedding, LSTM, Hypothesis Testing, SHAP, Partial Dependence Plots

Programming Languages: Python, R, SQL, MATLAB, Visual Basic for Applications (VBA), C++

Tools: GCP, AWS, Tableau, NumPy, Pandas, Matplotlib, Sklearn, PySpark, PyTorch, TensorFlow, ggplot2, R Shiny, Linux, Git