# Vishwesh Srinivasan

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#### Education

Tufts University, MA, USA | Master of Science in Data Analytics | GPA: 3.96/4.00Sep 2022 – May 2024National Institute of Technology Warangal, India | B.Tech in Mechanical EngineeringAug 2016 – Aug 2020

# **Experience**

# Data Intensive Studies Center, Tufts University, MA, USA | Research Intern

Jan 2024 - Present

Building machine learning models to detect rare circulating tumor cell clusters in whole blood.

#### Paragon Corporation, MA, USA | Database Programmer

Jan 2024 – Present

Developing and maintaining databases supporting the clients' operations.

# Data Analytics Department, Tufts University, MA, USA | Graduate Teaching Assistant

Sep 2023 - Present

• Teaching labs, conducting office hours, and supporting course logistics.

# JPMorgan Chase & Co., DE, USA | Al & Data Science Summer Associate, CCB Risk Modeling

Jun 2023 – Sep 2023

- Developed XGBoost classifiers using PySpark on AWS Cloud with and without additional guarantors' information to determine the outcome of a small business credit application.
- Following analysis, recommended not to collect additional guarantors' information for applications with less than \$250k exposure, which will lead to quicker decisions and improved customer satisfaction.

# Data Analytics Department, Tufts University, MA, USA | Graduate Research Assistant

Jan 2023 - Apr 2023

 Contributed to making D'Arcy Thompson's Glossary of Greek Birds accessible to the general audience using automated tagging and natural language processing techniques.

# Citigroup, India | Tech Program Application Developer – 1, PBWM Technology

Aug 2020 – Jul 2022

- Developed and maintained back-end systems for processing loans originating from Citibank's US markets.
- Developed an automated system to transform text reports generated to Interactive Dashboards using VBA.

# Language Technologies Research Center, IIIT Hyderabad, India | Research Intern

May 2019 – Jul 2019

• Implemented a Seq2Seq model with a reward function in Python for sentence simplification, which helped reduce the model's validation perplexity by 16% compared to the state-of-the-art model.

# Reliance Jio Infocomm Limited, India | Machine Learning Intern, Jio Coverage Platform

May 2018 – Jul 2018

• Improved the search experience of an internal platform, Foresight, used to monitor and fix network coverage issues. Improvements included building a recommendation system using NLP algorithms in R.

# SPI Cinemas Private Limited, India | Data Science Intern, Human Resources

Nov 2017 - Dec 2017

Analyzed the data of the frontline staff and implemented a classification model (with 87% accuracy) in Python to
predict the likelihood of an employee leaving within the first three months of joining.

#### **Projects**

# Relationship between air pollution and walkability in Greater Boston Region [Repository]

• Visualized the exposure to air pollution and walkability in the Greater Boston Region, implemented spatial regression models to study the relationship between these two variables, and found a positive correlation between them.

# Database system to manage the payroll system at Tufts Dining [Repository]

• Designed a database system and developed a user guide to manage the database. The user guide contains queries to add data and the most frequent scenarios for updating, deleting, and viewing the data in different forms.

# 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**

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

**Tools:** GCP, AWS SageMaker & EMR, Tableau, R Shiny, Elasticsearch, Kibana, Kepler.gl, Linux, Git, Jira, Excel, PowerPoint **Libraries:** NumPy, Pandas, Matplotlib, Scikit-Learn, PySpark, GeoPandas, PySAL, PyTorch, TensorFlow, ggplot