#### **Tushar Srivastava**

Boston, MA | (781) 824-6789 | tushar98@bu.edu | linkedIn.com/in/tusharsri1998

#### **EDUCATION**

# Master of Science, Computer Information Systems (Data Analytics Concentration)

Expected December 2022

Boston University, Massachusetts, USA

**Relevant Courses** - Data Science with Python, Advanced Database Management, Foundation of Analytics with R, Data Visualization with R, Web Analytics Mining, Advance Machine Learning.

## **Bachelor of Technology, Computer Science**

August 2016 - May 2020

IIITDM, Jabalpur, India

## **SKILLS/TOOLS**

Programming Languages: Python (NumPy, Pandas, Seaborn, Scikit-Learn, Keras), R (dplyr, tidyverse), SQL, JavaScript

Databases: PostgreSQL, MongoDB, SQL Server, MySQL

Data Visualization: Google Data Studio, Tableau, Excel, PowerBI

ML Algorithms: KNN, Logistic Regression, Random Forest, Naïve Bayes, K-means, Ensemble, Support Vector Machine, Tools/Frameworks: Visual Studio, Anaconda Navigator, R Studio, MongoDB Compass, Django, Flask, MEAN Stack, AWS

#### **WORK EXPERIENCE**

## Data Science Research Assistant - Boston University, Boston, MA

August 2021 - Present

- Collected data from SEERSTATS database of breast cancer patients, performed data cleaning, processing, and analysis of MassGeneral hospital patients with survival record of 5 years and 10 years based on various treatment procedures.
- Currently working under guidance of Dr. Saveli Goldberg and Prof. Eugene Pinsky to find the best classifier (Logistic 81% accuracy, Random Forest 84%, Neural Network 87% etc.) hyperparameter tuning to classify survival status.
- The end goal is to provide an optimal treatment procedure for survival based on patient's medical history.

## Teaching Assistant - Boston University, Boston, MA

August 2021 - December 2021

- Worked as teaching assistant for both Information structures with python and foundation of analytics with R courses.
- Responsibilities included taking informative sessions for a batch of 60 students and helping professor with grading.

#### Data Analyst Intern, Quantiphi Inc, Mumbai, India

August 2020 - January 2021

- Acquired hands-on experience in various tools and technologies namely Anaconda, Angular 8, Node, Python, Django, AWS Cloud services, MongoDB.
- Worked with AFLAC Clients (US) in developing a cloud-based (AWS) solution to fetch data from On-premises database, clean it and load it to Amazon RDS and send to datarobot for data analysis.

### Software Development Intern, Smartivity Labs, Delhi, India

May 2019 - November 2019

- Led a team to design a Django application for retaining track of Employee's daily work and generate a report showing funds spent on each project. Deployed it on IIS Server in AWS EC2.
- Developed a Process Flow Automation Software to keep track of progress of all product development phases utilizing MEAN Stack and devised an efficient algorithm to provide optimal product packaging combination.

#### **ACADEMIC PROJECTS**

#### **Data Warehouse using ETL and Web Scraping**

September 2021 - December 2021

- Analyzed tennis game statistics to study various player performances based on parameters like court type, player stats, tournaments. Followed ETL for data wrangling.
- Scraped and preprocessed data from multiple sources using python scripts, Transformed and Loaded data in PostgreSQL.
- Designed a dashboard in Google Data Studio to visualize player stats trend and optimized query runtime by 12%.

# GIF generation using Posenet Pose detection data and Clustering

September 2021 - December 2021

- Used Posenet output tensor data for 130 different physical exercises, decomposed the tensor using explode method and generated GIF.
- Utilized methods like PCA, t-SNE and u-map to reduce dimensions to 2, obtained 4 optimal number of clusters utilizing elbow method, implemented clustering methods like K-Means, DBScan, Birch and visualized 4 clusters in 2D and 3D.

## **Data Analysis of Tennis Games and Winner Prediction**

May 2021 - August 2021

- Collected data of all tennis matches from year 2015 to 2019, cleaned, processed, and analyzed data based on various features to create a functional dataset using NumPy and Pandas.
- Used Various Machine Learning Classifiers to find best model, achieved accuracy of 92% using Logistic Regression for winner prediction and plot trends using Matplotlib.
- Developed a user interface using Flask to predict the winner and display player stats.