# Hrishikesh Vinod Vibhute

Fairfax, VA 22030

#### Education

#### George Mason University

Jan. 2021 – Dec. 2022

Master's of Science in Computer Science (GPA: 3.95)

Fairfax, Virginia

#### Savitribai Phule Pune University

Aug. 2012 - Jun. 2016

Bachelor's of Engineering in Information Technology (GPA: 3.5)

Pune, Maharashtra, India

## Technical Skills

Languages: Python, R, C#, Java, HTML, CSS, JavaScript, jQuery, SQL

Developer Tools: Visual Studio, Visual Studio Code, Jupyter Notebook, Spyder

Technologies/Frameworks: Natural Language Processing, Machine Learning, Deep Learning, PyTorch, TensorFlow, Keras,

EPiServer CMS, GitHub, .NET MVC Framework, Google Analytics

### Professional Experience

## George Mason University

Aug. 2021 - Aug. 2022

Graduate Research Assistant (Data Analyst)

Fairfax, Virginia

- Analyzed and devised scripts in R programming language for pre-processing real Jail data to get structured information from different files type like pdf, MS Excel, XML with 500k+ records.
- Utilized SQL operations like joins in R using sqldf package (sqlplus) to transform data in the required format to optimize further analysis process.

#### TietoEVRY India Pvt. Ltd.

Nov. 2016 - Nov. 2020

Pune, Maharashtra, India

- Software Engineer (Web/EPiServer Developer)
  - Designed and implemented solutions for EPiServer CMS-based web application in ASP.NET MVC to enhance user experience and increase user engagement on specific web pages by 58%.
  - Integrated third-party APIs such as Marketo, Twitter, Instagram within the application with a customized view and accomplished a 42% increase in user involvement on social media platforms. Also incorporated a service to automate the regeneration and replacement of Instagram access token prior to its expiration.
  - Implemented a module in "Resume Parser" consisting of extracting insightful information from textual data using Python, NLP and Data mining techniques for the HR recruitment team helping to increase job application process by 48%.

# Persistent System

June 2015 - June 2016

Research Intern (Data Science)

- Pune, Maharashtra, India
- Assisted in the development of an application for predicting upcoming movie revenue using technologies like Python, Machine Learning regression algorithms such as linear, polynomial, Support Vector Machine, Decision Tree, Random Forest, Natural Language Processing, Apache Hadoop, etc. following the Agile Methodology.
- Structured the application to get insights from textual data by utilizing NLP techniques and ML regression algorithms for predicting revenue to achieve accuracies ranging from 65% to 85% in regression problems.

# Academic Projects

**Humpback Whale Identification** | Python, PyTorch, Deep Learning, CNN, Image Hashing

Nov. 2021 - Dec. 2021

• Implemented multiple CNN AlexNet, VGG11, DenseNet121, Siamese NN models in PyTorch to identify individual whale using 33k+(approx.) whale's fluke image dataset to achieved accuracies ranging from 42%- 94%.

## Artificial Face Generation | Python, PyTorch, Generative Adversarial Network, CUDA

Oct. 2021

• Developed GAN and LSGAN to generate faces using CelebA dataset. Also attack the neural network by using FSGM to degrade its performance, and used input transformation techniques to defend the neural network.

#### Movie Popularity and Revenue Prediction | Python, Data Mining, ML

Feb. 2021 - April. 2021

• Developed a model using Python and ML algorithms to classify a movie's popularity and predicting its revenue with data of 8000+ movies from OMDb and IMDb, accomplished model accuracies ranging from 69% - 92%.

#### Amazon Review Classification | Python, Data Mining, ML, Sentiment Analysis, Text Classification

• Implemented a KNN algorithm to classify sentiment for 18.5K+ amazon product reviews. Utilized features of NLTK to clean and transform, TF-IDF for text vectorization and cosine similarity for calculating similarity scores between the reviews to achieve accuracy of 79%.