# **Adhvaith Vijay**

U.S. Citizen

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#### **EDUCATION**

#### University of California, San Diego

Master of Science in Data Science, Concentration in Finance and Machine Vision

GPA: 4.00

Relevant Coursework: Data Management for Data Science, Scalable Data Systems, Advanced Data Mining, Advanced Optimization, Machine Learning, Big Data Analytics and Applications, Statistical Models

#### University of California, Los Angeles

Sept 2019 - June 2022

**Graduating: December 2023** 

Bachelor of Science, Statistics, Cum Laude

GPA: 3.90

Relevant Coursework: Databases, Time-Series Analysis, Advanced Python, Data Mining, Computational Statistics, Monte Carlo Methods, Regression Analysis, Data-Driven Mathematical Modeling

Activities/Societies: The Data Science Union, Teaching Assistant (Python with Applications), DataRes at UCLA

#### **WORK EXPERIENCE**

#### JPMorgan Chase & Co. | AI and Data Science Intern

June 2022 - Aug 2022

- Worked in the Consumer & Community Banking division to improve model interpretability by binning loan applicants and hierarchically clustering model features
- Maintained an ETL pipeline for Consumer & Community Banking risk records and preprocessed 100 GB of raw consumer records for use across business banking loan models
- Used Pyspark and XGBoost to improve the accuracy of our team's small business loan default model by 12%

#### Carnegie Mellon University | Summer Research Fellow

June 2021 - Aug 2021

- Project: <u>An Interpretable Method of Learning Stochastic Game Dynamics</u>
- Developed a more accurate methodology to predict expected goal count in soccer by utilizing stochastic processes
- Built a web application backend using Python integrated with a Javascript frontend to enable users to pit two soccer teams against one another and visualize the outcome of a match

#### Rolls-Royce North America | Data Science Intern

Aug 2019 - May 2020

- Built an algorithm to identify when a Rolls-Royce AE3007 engine has reached its optimal compressor wash interval
- Mapped 500K datapoints of Rolls-Royce engines to public commercial flights (across a 5-year span) to create a 1:1 engine to plane relationship when geospatially visualizing flight paths
- Reduced the hours required to recognize which flights require compressor wash from 3-4 hours to less than 5 minutes by deploying a R Shiny application that structures, visualizes, and pinpoints hundreds of at-risk planes in real-time

## LPL Financial Holdings, Inc. | Information Security Intern

May 2019 - Aug 2019

- Visualized and investigated data transfer cybersecurity risk from company 3<sup>rd</sup> party vendors
- Cleaned 87 MB of LPL user portal data with Python and transformed cataloged logs into multiple workable data frames to identify instances of malicious access on the company website
- Presented a risk assessment report to senior executives highlighting frequent gaps in data privacy regulations

#### PERSONAL PROJECTS

Track Together (Python, TensorFlow, Google Cloud Speech API)

Created an AI-Powered Chatbot using Tensorflow, which responds to COVID-related question audibly in order To assist
the visually impaired

#### **Dog Breed Predictor** (Python, TensorFlow, OpenCV)

- Developed a Dog Breed predictor in Tensorflow using transfer learning on more than 200 dog breed classes
- Achieved an 83% accuracy, and deployed work as a web application using Streamlit and Heroku to allow users to get real-time results after taking a picture of a dog

# **Retina AI Datathon** (R, Feature Engineering, SMOTE)

- Examined how the lifetime revenue a customer generates, weighs against a customer's acquisition cost
- Recommended acquiring higher lifetime value customers at the outset by dissolving subscription-based models
- Won 2<sup>nd</sup> place out of 50 teams across the nation

Other Data Projects: Image Style Transfer with Cycle GANs, Creating Song Lyrics with unsupervised transformer models

## **SKILLS**

Languages/Libraries: Python, R, Pyspark, HTML, PyTorch, NumPy, Pandas, OpenCV, Sklearn, XGBoost, NLTK, Plotly

Platforms: JupyterLab, GitHub, Airflow, Bitbucket, MS Excel, AWS Cloud Services

**Database/BI Tools:** MySQL, PostgreSQL, Tableau

**Techniques:** A/B Testing, NLP, Time Series Forecasting, Regression, Classification