### ADITYA KULKARNI

Available Summer 2020

#### **EDUCATION**

#### Stevens Institute of Technology, Hoboken, NJ

**Expected May 2021** 

Master of Science in Computer Science

Coursework: Algorithms, Deep Learning, Introduction to Text Mining/Statistical NLP, Introduction to Quantum Computing, Web Programming

#### Ramnarain Ruia Autonomous College, Mumbai, India

**June 2019** 

Master of Science in Computer Science

Coursework: Machine Learning, Introduction to Robotics, Cyber Security

## V.E.S College of Arts, Science and Commerce, Mumbai, India

Aug 2017

Bachelor of Science in Information Technology

#### **TECHNICAL SKILLS**

Programming Languages: Python, JavaScript, Node.JS, C++, Java, R

Supporting Libraries: Keras, TensorFlow2.0, NumPy, Pandas, Matplotlib, PyTorch, OpenCV, Scikit-learn, NodeJS, ReactJS Database and Software: MongoDB, MySQL, Firebase, PyCharm, VSCode, Anaconda, Jupyter

Operating Systems: Windows 10, Linux (Ubuntu 18.04 LTS)

Certifications: Machine Learning Advanced Nanodegree, Udacity 18; Introduction, CNN in TensorFlow, Coursera 19

### **ACADEMIC / PERSONAL PROJECTS**

# Stevens Institute of Technology, Hoboken, NJ

# **Humpback Whale Identification**

Nov - Dec 2019

- Implemented a convolution neural network from scratch using Python 3.7 and TensorFlow 2.0 aiming to solve object identification problem by predicting whales based on their tails
- Pre-processed the images leveraging Scikit-learn, TensorFlow and Pandas.
- Trained and tested the model on NVIDIA GTX 1060 achieving an accuracy of 74% on the test set

### **Expense Tracking Application**

Nov - Dec 2019

- Led a team of 4 to build a web app using NodeJS and mongo dB which is geared towards solving expense management
- Created a platform for users to track their expenses and split them with other users, add recurring expenses and check the expense trends on dashboard

### Ramnarain Ruia Autonomous College, Mumbai, India

#### **Face Verification System**

Sep - Oct 2018

- Developed a Deep Learning model trained on VGGFace dataset using Python3.6 and Keras by applying transfer learning
- Utilized OpenCV's haar-cascade algorithm for face detection and tracking in real-time and cosine similarity for feature matching
- Provided an interface to add faces to database and run real time face identification

### **Facial Key point Detection (Personal)**

**Dec 2018** 

- Created multiple CNN models from scratch which placed markers on facial key points (mouth, eyes, nose, eyebrows) solving object detection problem
- Pre-processed images using Pandas and Numpy and plotted them using Matplotlib
- Trained multiple models demonstrating various approaches like data augmentation, applying dropout and achieving a public score of 3.16 and private score of 3.09 and ranked in top 75 of leaderboard

# **EXPERIENCE**

# Invizio Solutions LLP, Mumbai, India Android Developer Intern

Feb - Apr 2019

- Created a cart module with an on-device database ObjectBox and re-designed the app homepage to improve navigation
- Performed functional, peer to peer and API testing of the product and drafted a detailed report for the same

#### Instinct Media, Mumbai, India

Apr - May 2016

# **PHP Developer Intern**

- Assisted the development team to build a content management system for a client
- Maintained 2 live websites by adding/updating information, maps locations with addresses and social media links