

# TUSHAR MHALSEKAR

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## EDUCATION

### Arizona State University

Master of Science in Computer Science | GPA: 3.67/4.0

Tempe, AZ

Aug. 2019 – Expected May. 2021

### St. Francis Institute of Technology

Bachelor of Engineering in Computer Engineering | GPA: 8.5/10

Mumbai, India

Jul. 2015 – May. 2019

## EXPERIENCE

### Cateina Technologies (www.stopcovid.io)

Remote

Software Development Intern

Jun. 2020 – Aug. 2020

- Collaborated on a Blockchain platform for Comgo which helps users to check, in real-time, the impact their donations generate for NGO projects that are combating the effects of the COVID-19 pandemic across Spain.
- Developed the core of the platform using a tech stack consisting of MongoDB, Express.js, Angular and Node.js.
- Configured the Blockchain framework using Hyperledger Fabric to trace the impact of the aid offered by the donors.
- Designed a smart contract that involved setting up certificate authority along with order and peer nodes.

### Indian Data Science Hub

Mumbai, India

Software Development Intern

Jun. 2019 – Sep. 2019

- Collaborated on a beginner-friendly end-to-end Machine Learning toolkit built using Python and Angular.
- Developed the data modeling module for the toolkit which involved emulating algorithms like Linear models, K-Nearest Neighbors, Neural Nets, etc.
- Orchestrated team meetings for coordinating the process of designing the user interface to achieve consistency throughout the application.

## PROJECTS

### Identifying Depression Symptoms on Social Media [ Python, Flask, Javascript, HTML/CSS]

- Devised a tool which detects depression symptoms in users on Twitter by performing natural language processing on the user's tweets.
- Implemented system was able to achieve an accuracy of nearly 70 % for predicting probable symptoms of depression that is based on the PHQ-9 (Patient Health Questionnaire-9).

### Geo-Spatial Data Analyzer for Ride Sharing Services [ Java, AWS, Hadoop, Apache Spark]

- Designed a Java application to identify busy commute areas to help drivers find customers faster and more efficiently.
- Deployed the application using Amazon Elastic Cloud(EC2) services to achieve about 36 % faster performance and 50 % less memory utilization compared to local machine performances.

### Stock Prediction using Viral Trends [ Python, Flask, REST, Javascript, HTML/CSS]

- Built a website which predicts the rise and fall of stock prices based on viral news and social media trends using machine learning.
- Implemented system was able to predict hourly stock price direction with an accuracy of nearly 70 %.

### Eyedentify(Object Detection Android Application) [ Python, Java]

- Developed an object detection application to help visually impaired users to navigate through environments using the TensorFlow and SSD MobileNetV1 neural network models which achieved an accuracy of 73 %.
- Incorporated text-to-speech functionalities which notified the users of the type of object in the vicinity.

### Sell it (Android Classifieds Application) [ Node.js, Firebase, Java]

- Created an android application where users can interact and perform trade with other users.
- Deployed the application using Google Cloud Platform and used Elasticsearch for distributed real time search.

## SKILLS

**Languages:** Python | C++ | C | Java | SQL | Javascript | HTML/CSS

**Frameworks/Technologies:** Angular | Flask | Hadoop | React | Apache Spark | Node.js | Git | REST | Express.js

## EXTRACURRICULAR

### Object Oriented Programming Teaching Assistant

Tutored and handled the grading for 120 students.

### Member of Social Responsibility Cell

Organized and managed multiple orphanage visits, social awareness and cleanliness drives across Mumbai.