Aashay Mukesh Motiwala

ashaymotiwala@gmail.com | +1 (669) 204-8995 | Santa Clara – 95050
LinkedIn | GitHub | Website

EDUCATION

Santa Clara University **Mar 2021 - Mar 2023**
Master's in Computer Science and Engineering - GPA: 4.00 (at present)
Coursework: Design and Analysis of Algorithms, Computer Architecture, Advanced Database Systems, Computer Networks.

University of Mumbai, Atharva College of Engineering **Jun 2016 - Nov 2020**
Bachelor of Engineering in Information Technology - GPA: 3.6
Coursework: Data Structures, Operating System, Object-Oriented Analysis and Design, Data Mining, Big Data, Artificial Intelligence, Computer Networks, Database Management, Computer Architecture, etc.

PROFESSIONAL EXPERIENCE

Capgemini – Software Developer Intern **Nov 2020 – Feb 2021**
- Worked on 'Running visual quality inspection at the edge with Google Cloud,' which identified defects on metal plates by analyzing cracks and weak bonds in image datasets containing sample images using Google Cloud Platform's AutoML and Big Query.
- Developed 'Anomaly detection in Financial Transactions' using GCP's Cloud AI Dataflow and Big Query. Designed a TensorFlow boosted tree model using Kaggle dataset and deployed it to Cloud AI for online predictions.
- Implemented 'Pneumonia Detection Using Chest X-Ray Images' using Google AutoML. The model determined whether a person has pneumonia or not by comparing it to the X-Ray of 1349 healthy lungs. It is also capable of determining the type of pneumonia (Bacterial or Viral).

Try Catch Group - ML Intern **Aug 2019 – Feb 2020**
- Generated sentiment analysis on the topic 'Elections in India' by using the Twitter API to extract all tweets related to elections and AFINN dictionary to generate a sentiment rating for each tweet.
- Developed an 'Indian Premier League 2008-2018' model that examines key success factors for top IPL cricket teams. The data set consisted of 18 variables and 600+ observations for each match.
- Designed an ML based "House Price Predictor" which predicted the cost of house depending upon the locality, connectivity and other factors.

TechCryptors – Embedded systems and ML Intern **Jun 2018 – Aug 2018**
- Built an Arduino powered embedded system with a camera and applied machine learning algorithms to detect various objects in its surroundings.
- Organized workshops on Game development (Unity), IOT, Robotics etc.

PROJECTS

E-Voting using Block Chain
- Implemented a block chain based on the concept of monetary transactions and secured the transactional process with SHA-256 encryption.
- Employed facial recognition and Aadhaar authorization for security using restful services and neural networks. Used block chain to hash all the votes casted.
- Technology used: Python, Machine Learning, OpenCV, PyQt5, Neural Network, Haar-Cascade, Postman.

Gender Recognition by Voice
- Designed a model that determines whether a voice is of a male or a female. Used acoustic properties of voice and speech with a data set with 21 variables and over 3,000 observations.
- Technology used: PyAudio, Speech Recognition.

Stock Price Prediction
- Developed a model using a company's historical data with the capability of predicting the stock price for the next three days.

TECHNICAL SKILLS

- **Programming Technologies** : Python, Java
- **Web Technologies** : JavaScript, ReactJS, NodeJS, Express, HTML, CSS, Bootstrap, PHP
- **Database tools** : MySQL, MongoDB, Firebase
- **Development environment** : Microsoft Visual Studio, Spyder, Jupyter
- **Cloud Technology** : Google Cloud Platform
- **Version Control** : Git

ADDITIONAL COURSE CERTIFICATIONS

- Algorithmic Toolbox offered by University of California San Diego
- Machine Learning with Python- IBM
- Data Analysis with Python- IBM
- Data Visualization with Python- IBM

PUBLICATIONS

- "E – Voting System Using Block-chain". Published in Samriddhi, A Journal of Physical Sciences, Engineering and Technology. Volume 11 No SUP (2019).