MAHAVIR CHANDALIYA

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EDUCATION

San Jose State University, San Jose, CA **Jan 2022-Present**
Pursuing Master's in Computer Engineering. **(Current GPA: 3.2/4)**
Relevant Coursework: Machine Learning, Data Mining, Enterprise Software platforms, Quality Assurance and Testing.
D.J. Sanghvi College of Engineering, Mumbai University, India **Aug 2016 -Nov 2020**
Secured Bachelor of Computer Engineering. **(CGPA: 7.29/10)**
Relevant Coursework: Applied Maths, Algorithms and Data Structures, Advance Algorithms, Databases and Big Data.

PROJECTS

Blood Analyzer Using Image Processing and Computer Vision (May 2020)

- Developed an Automated Blood Analyzer which returns Haemoglobin level, RBC, WBC and Platelet count in the blood from a microscopic blood sample image. The objective was to design an efficient and accurate method for blood analysis that can provide reliable results in less time than traditional manual methods.
- *Skills and Tools Used*: Image Processing, Computer Vision, Python, tkinter, OpenCV, Scikit-image, NumPy, Pandas, Machine Learning, Data Pre-processing, Feature Extraction, Classification.

Book Genre Prediction (Dec 2022)

- Built an Automated genre classification application with UI which uses deep learning to predict genres of literature from book summaries. Performed various natural language processing steps, tested various models on the CMU book summary dataset and Blurb genre collection dataset and later implemented multilabel classification using Linear SVC, we found that SGD(Tri-gram) and LSVC(Bi-gram) performs with highest accuracy.
- *Skills and Tools Used*: Natural Language Processing, Python and its data libraries, Keras, NLTK, Scikit-multilearn, Flask, matplotlib, Word processing, Data cleaning and augmentation, Deep learning, Feature Extraction, Classification.

Age, Gender, Emotion Prediction using Facial Data (Aug 2022)

- Developed an application that uses deep learning models to detect faces from a webcam and predicts user's Age, Gender and Emotion in real time. Used MTCNN algorithm based on FaceNet for detecting faces and python's cv2 library for capturing video and rendering predictions on the screen. Trained 3 different models using CKPlus Facial Emotion and UTKface datasets. Drafted a Research paper based on the project for school.
- *Skills and Tools Used*: Python and its various modules like tkinter, pickle, cv2, PIL, mtcnn, Numpy, pandas etc.

PUBLICATIONS

Social Distancing Detection using Computer Vision (April 2021)

- Research paper on Social distancing detection by continually monitoring the distance between people in a public place to enforce social distancing. Developed using Tensor flow, OpenCV and Python, the application detects people on a live video feed from a CCTV camera, highlights the person if social distancing norms are broken.
- Presented the paper at 5th International Conference on Computing Methodologies and Communication (ICCMC 2021) which later was published in IEEE.

WORK EXPERIENCE

NRAT Student Assistant at San Jose State University (June 2022 - Present)

- Working as a Student Assistant for E-campus department at San Jose State. Providing support and resolving queries regarding instructional software used in the school for undergraduate and graduate programs.
- Solved 1000+ queries and assisted 500+ students and teachers with installation, troubleshooting various Instructional software which includes Canvas, Zoom, Qualtrics, Proctorio, Google applications, Camtasia, Adobe CC etc.

TECHNICAL SKILLS

- *Programming Languages*: Python, C, C++, Java, SQL, PHP.
- *Data science tools*: Pandas, NumPy, Scikit-learn, NLTK, TensorFlow, Keras, Matplotlib, Seaborn.
- *Database technologies*: SQL, MySQL, MongoDB, Amazon Web Services (AWS), Google Cloud Platform (GCP).
- *Web development*: HTML, CSS, JavaScript, Node, React, Django, Flask.
- *Other software's and tools*: Android Studio, React Expo, Anaconda, Tableau, Jupyter Notebook, Linux, Git and GitHub.

CO-CURRICULAR & EXTRA-CURRICULAR ACTIVITIES

- Winner of AI Social hackathon 2022 by Intel. Won in the ML track where we deployed a Random Forest model to predict whether freshwater is consumable using Intel's infrastructure, MLFlow and Python libraries.
- Volunteered at IDF (Indian Development Foundation), an NGO for Education and Health welfare in Mumbai, devoted 75 hours of community service through health drives and educational events in 2018 – 2019.
- Participated in Coding Hackathons and various Coding Competitions online and also took part in various technical workshops such as Raspberry Pi and Python workshop (Mar 2017), Ethical Hacking and Cellular Security (Oct 2016).