AMEYA JAIN

ameyajain@umass.edu | (718)581-8069 | ameyajain | ameya-jain

EDUCATION

University of Massachusetts, Amherst
BS in Computer Science
Second Major: Mathematics with concentration in Statistics and Data Science
***GPA** : 3.76* *Expected Graduation: May 2023*

Relevant Courses:
Data Structures, *Algorithms*, *Linear Algebra*, *Computer Systems Principles (C Programming)*, *Theory of Computation*, *Artificial Intelligence*, *Probability Theory*, *Multivariate Calculus*, *Programming Methodologies*, *Fundamental Concepts of Statistics*, *Natural Language Processing*

SKILLS

Programming Languages: Python, Java, JavaScript, C/C++, R, MATLAB, Dart, HTML/CSS
Tools & Libraries: Linux, Git, OpenCV, Pandas, Tensorflow, sckit-learn, MatplotLib, Flutter, React

EXPERIENCE

Mosaic Lab
Research assistant *October 2021 - Present*

- Identifying inflammation bio-markers from MIMIC Waveform Dataset
- Creating Machine Learning algorithms to predict the same
- Using numpy, csv, matplotlib and other vital python libraries to process and plot data
- Extensively used Linux and Gypsum clusters

Mission: Mentor
Software Developer Intern *May 2021 - August 2021*

- Developed a full stack website using **React.js** and **CSS**
- Created multiple backend flows for various aspects of user signup and login through **AWS Cognito**
- Collaborated with a team of 5+ developers using key functionalities of **Git** and **Github**
- Implemented a **hierarchy system** to sort huge datasets based on academic categories

SRS VALUETECH
Research Intern *Jun 2019 - Aug 2019*

- Researched about Machine Learning frameworks in Computer Vision such as **Convolutional Neural Networks** and **Haarcascade classifier** to develop smart parking.
- Performed **data pre-processing** steps that involved annotating images of bikes, trucks, and other vehicles
- Learned and examined **Microsoft Cognitive Toolkit** to compare object-recognition accuracy and efficiency
- Achieved **higher accuracy model with better speed** on live cam with OpenCV and OpenFace than Keras and Facenet

PROJECTS

Connect 4 AI **Spring 2021**

- Created a Connect 4 game AI using Mini-max Algorithm with static heuristics

Weight Measurement Using Machine Learning **Science Fair 2019**

- Developed an ML model that calculates human weight using measurements of body parts such as waist and limbs
- Performed **data cleaning and pre-processing** steps on Anthropometry data retrieved from **CDC**
- Used **Tensorflow** to calculate the body measurements
- Implemented **multivariate regression** to predict the weight of future data values
- Achieved an accuracy of around **90%** on new data points

What do I do?! **HackUmass 2020**

- Created an application using **Flutter Development Kit** that suggests different recreational activities
- Developed an algorithm which found items of similar categories and determined a **relevance factor** for each category
- Implemented a profile that took weather, location and time into consideration to suggest user-suited activities