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EDUCATION

Harvey Mudd College, Claremont, CA (GPA: 3.74) Expected May 2022
B.S., Mathematics and Computer Science; Humanities Concentration in Philosophy

Montclair Kimberley Academy, Montclair, NJ (*cum laude*, GPA: 3.89) June 2018

RELEVANT COURSEWORK

Completed: Discrete Mathematics, Differential Equations / Linear Algebra 2, Multivariable Calculus, Probability and Statistics
Spring 2020: Mathematics of Big Data 1, Data Structures and Program Development, Computability and Logic, Abstract Algebra 1, Financial Markets and Modeling

SKILLS

Programming Languages: Python (proficient), C++ (proficient), Java (proficient), C# (proficient), Bash (familiar)
Models: Recurrent neural networks, random forest regression/classification, K-nearest neighbors, logistic regression
Software: TensorFlow, Keras, Scikit-learn, Pandas, NumPy, CherryPy

TECHNICAL EXPERIENCE

Viasat, Inc.—*Software Engineer Intern* May 2019 - August 2019
Intern Project: Built and delivered a heads-up display on Microsoft HoloLens that improves soldier situational awareness.

- Built REST API using CherryPy Python Library to enable communication between HoloLens and Link 16 radio network.
- Developed a global runtime manager in C# to handle distribution of data into assets (map, compass, and radar), allowing for live updating of heads-up display.
- Built an interactive and dynamic map displayed on HoloLens using Unity and C# scripting to allow military soldiers to view friendly and hostile units from Link 16 radio data.
- Presented by Viasat at the Association of the United States Army Conference in October, 2019.

General Assembly: Data Science Course—*Student* June 2017 - August 2017

- Built random forest regression model in Python to predict the final sale prices of Iowa houses with over 90% accuracy.
- Presented the model's results to General Assembly faculty and students.

PROJECTS

Automated Trading System—*Personal Project* January 2019 - Present

- Built a recurrent neural network with long short-term memory architecture using TensorFlow to predict changes in stock price based upon market history.
- Automated trading of stock using Alpaca API, Bash scripting, and the neural network's predictions to create a net-positive automated trading system.

LEADERSHIP AND VOLUNTEER EXPERIENCE

STEM Together Organization—*Founder and President* September 2015 - June 2018

- Founded an organization that taught multiple computer programming courses for the Montclair Kimberley Academy with a team of five instructors and forty students enrolled per year, and a summer course for the Montclair Public Library with four instructors and eighteen students enrolled.

AWARDS AND ACHIEVEMENTS

Harvey S. Mudd Merit Award, Harvey Mudd College, 2018 - 2020
Awarded $10,000 scholarship for "superior academic achievement and ability to contribute to the College community."
Dr. Peter R. Griel Character Award, Montclair Kimberley Academy, 2018
Awarded to 1 person in senior class (130 students) based on "personal character" and receives $2,500.
MacVicar Leadership Prize, Montclair Kimberley Academy, 2017
Awarded to 3 persons in junior class (130 students) for "outstanding personal character" and "qualities of leadership."