# **Christopher Wang**

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#### **EDUCATION**

# University of California, Berkeley

Berkeley, CA

B.A in Computer Science and Statistics | GPA: 3.68/4.00

Expected May 2023

- Relevant Coursework: Algorithms, Data Structures, Discrete Mathematics, Information Systems, Linear Algebra and Differential Equations, Multivariable Calculus, Probability Theory
- Clubs and Activities: Computer Science Mentors (CSM), Intramural Basketball

#### PROFESSIONAL EXPERIENCE

# **UC Berkeley EECS Department**

August 2020 – Present

Teaching Assistant

- Teach weekly 2-hour discussion sections and labs for 20-30 students, host office hours, and provide personalized student support for CS 61A, the introductory algorithms course at UC Berkeley with over 2000 students
- Teaching topics include higher-order functions, recursion and recursive data structures, OOP, and REPL

Juni Learning

*April* 2020 – *August* 2020

Computer Science Instructor

- Lead weekly private lessons to 12 students with a project-oriented curriculum emphasizing fundamental computing concepts such as inheritance, data structures, efficiency and "big O", sorting algorithms, and object-oriented design
- Personalize curriculum to students' progress and conduct check-ins to evaluate areas for curriculum improvement

## JP Morgan Chase & Co

*February 2020 – April 2020* 

SWE Virtual Experience Program

- Utilized statistical analysis and price ratios to monitor, and assess the stock market to find undervalued stocks
- Assisted in implementing JP Morgan Chase's open source code Perspective to help solve data visualization challenges

#### **PROJECTS**

# **Higgs Boson Research Project**

August 2020

Lawrence Berkeley National Laboratory

- Assisted in particle physics research by implementing and fine-tuning maximum likelihood fit models to analyze datasets produced from large hadron collider for re-discovery of Higgs Boson elementary particle
- Produced plots and data visualizations of diphoton invariant mass distribution and transverse momentum

# **Clothing Classifier**

June 2020

- Developed neural network model to classify images of clothing into shirts, trousers, dresses, coats, and sneakers
- Utilized tensorflow to train and implement model with over 90 percent prediction accuracy on testing data

#### **Final Grade Predictor**

*May 2020* 

- Programmed linear regression model to predict student's final grade based off past exams, attendance, and study time
- Model can predict final grade with high accuracy with a negligible mean error, and standard deviation of < 5 percent

# **Stock Trading Bot**

March 2020

- Built a trading bot through Alpaca Trading API pairs trading strategy to predict optimal buying and selling opportunities while accounting for daily volatility
- Implemented an email notification system which provides detailed email updates of daily trades to user

# PROGRAMMING EXPERIENCE

- Languages: Fluent in Python and Java; familiar with C++, C#, JavaScript, HTML, SQL
- Frameworks/technologies: Git, matplotlib, NumPy, pandas, sci-kit learn, tensorflow
- **Statistics/Machine Learning:** k-Means clustering, KNN, Linear and logistic regression, neural networks, regularization, SVM