Maximillian Guo

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**EDUCATION** 

Harvard University (GPA: 3.99/4.0) Cambridge, MA

S.M. in Applied Mathematics (Concurrent Master's).

May 2023

A.B. in Computer Science and Statistics, Secondary in Economics.

May 2023

Awards: John Harvard Scholar (3-time), Detur Prize, Certificate of Distinction in Teaching (4-time).

Sycamore High School (GPA: 4.0/4.0)

Cincinnati, OH

Awards: Valedictorian, USA Math Olympiad (3-time), US Chemistry Olympiad (2-time, Top 50).

May 2019

**EXPERIENCE** 

Harvard University

Cambridge, MA

Student Researcher · Summer Program for Undergraduates in Data Science Research Fellow

May 2022 - Present

- o Inventing a new deep Bayesian neural network-based model to interpolate and improve upon the performances of maximum a-posteriori based Neural Linear Models and fixed-kernel Gaussian Processes.
- Empirically evaluating different parametrizations and architectures of the model with regularization interpretations.

Harvard University

Cambridge, MA

(Head) Teaching Fellow (TF) for Harvard's Introduction to Artificial Intelligence Course

Fall 2022, Fall 2021

- Expanded course from an enrollment of 65 in 2021 (as a regular TF) to an enrollment of 115 in 2022 (as the head TF).
- Created 5 problem sets with a combined total of 5 in-depth programming problems and over 20 theoretical problems.
- Supervising the creation of at least 15 new handouts, including new problem sets, section notes, and lecture notes.
- o Directing weekly meetings to coordinate responsibilities of course material creation, grading, and responding to students.

Five Rings Capital

New York, New York

Quantitative Trader Intern

May 2021 - August 2021

o Conducted quantitative research and mock trading via data analysis (intentionally vague in compliance with the company).

Harvard University

Cambridge, MA/Remote

Teaching Fellow/Course Assistant for Multiple Courses

August 2020 - Present

- o On course staff for 9 courses in math, statistics, computer science (One or more iterations of: Theoretical computer science, Machine Learning, Artificial Intelligence, Group Theory, Probability, Statistical Inference).
- Taught in all possible formats, ranging from large lectures of over 100 students to 1-1 tutoring, both virtually or in person.

## LEADERSHIP AND ACTIVITIES

## Harvard Association for U.S. China Relations

Cambridge, MA

Executive Board, Finance Director (2021-2022), Conference Director (2020-2021)

August 2020 - August 2022

- o Directed budget of \$200,000 for international conference, community, and organizational expenses.
- Partnered with nonprofit to host a 5 week long hybrid conference for Chinese students.
- o Recruited over two dozen professors, student organizations, and student mentors for conference programming involving seminars, panels, masterclasses, and mentorship pairings.

## Harvard Square Homeless Shelter

Cambridge, MA

Supervisor (2022-2023), Resource Advocate (2021-2022)

November 2021 - Present

- Connected several guests to local resources for shelter, food, and administrative needs on a weekly basis.
- o Instituted a new centralized activities tracker to document dozens of client cases and coordinate across resource advocates.

## SKILLS AND INTERESTS

Programming Languages: Python, R, C++ Python Packages: Numpy, Pandas, Seaborn, Sklearn, PyTorch Interests: International Development, Juggling, Calisthenics, Piano