Maximillian Guo

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Education

Harvard University   Cambridge, MA
A.B in Computer Science and Statistics. GPA 4.0/4.0.   May 2023
John Harvard Scholar (2021, Top 5% of Class).

Sycamore High School   Cincinnati, OH
Valedictorian. USA Math Olympiad (3-time), US Chemistry Olympiad (2-time, Top 50).   May 2019

Professional Experience

Harvard College Research Program   Cambridge, MA
Researcher (advisors: Dr. Bertrand Schneider, Edwin Chng)   Sept. 2021 –Present
- Developing an artificial intelligence agent for pedagogical use in scientific labs.
- Coordinating ML pipeline consisting of an object detector, human detector, and attention transformer.

Five Rings Capital   New York, New York
Quantitative Trader   May 2021 – Aug. 2021
- Used rigorous quantitative and data analysis skills to complete research and development project.
- Participated in mock trading to obtain familiarity with how the market operates at the level of individual orders.

Harvard University   Cambridge, MA
Researcher (advisors: Dr. Demba Ba, Bahareh Tolooshams)   Mar. 2020 – Aug. 2020
- Designed and implemented deep neural networks based on convolutional dictionary and sparse coding for compressed learning.
- Trained and evaluated several variations of the model on standard image denoising datasets on AWS.
- Visualized reconstructions and frequency content in the Fourier domain.

Leadership and Activities

Harvard Association for U.S. China Relations   Cambridge, MA
Finance Director   Aug. 2021 – Present
- Directing budget of $200,000 for international conferences, community events, and other expenses.

Executive Board, Conference Director   Sept. 2020 – Dec. 2020
- Partnered with Chinese nonprofit to recruit professors and student organizations in hosting seminars, student panels, masterclasses, and developing a research project during a five-week long hybrid conference for top Chinese high school academics.

Harvard Square Homeless Shelter   Cambridge, MA
Resource Advocate   Aug. 2021 – Present
- Managing and organizing dozens of client cases via tracking spreadsheets and resource folders.

Competitions, Independent Projects, Teaching

Teaching Fellow. (2020, 2021) CS121 (CS Theory), Stat110 (Probability), CS182 (AI), Math101 (Proofs).
Citadel + Correlation One Terminal Challenge. (2021) East Coast Regional Finalist (Top 12).
Stylization of Objects. (2020) Styles objects in images using Mask R-CNNs and neural style transfer.

Skills & Interests

Technical: Python, C++, LaTeX. **Packages:** NumPy, Matplotlib, Pandas. **ML:** Sklearn, PyTorch, TensorFlow.
Language: Mandarin (fluent).
Interests: Piano, Juggling, Calisthenics.