# MICHAEL ZHANG

michaelszhang.github.io

#### **EDUCATION**

Massachusetts Institute of Technology | Cambridge, MA

Feb 2024

Master of Engineering: Artificial Intelligence Concentration

GPA: 5.0/5.0

Worked with professor Phiala Shanahan on flow-based sampling algorithms for large-N gauge theories.

Massachusetts Institute of Technology | Cambridge, MA

Jun 2023

Bachelor of Science: Double Major in Computer Science and Math, Minor in Physics

GPA: 5.0/5.0

Relevant Coursework: Machine Learning, Statistical Learning Theory, Algorithms for Inference

#### WORK EXPERIENCE

Quantitative Trader, Jane Street | New York, NY

Jan 2024 - Present

- Options trader.

Quantitative Trading Intern, Jane Street | New York, NY

Jun 2023 - Aug 2023

- Worked with full-time options traders on various quantitative projects.

Quantitative Trading Intern, Jane Street | New York, NY

May 2022 - Aug 2022

- Used Pandas and Excel to investigate cryptocurrency market structure and stock-exchange closing auctions.
- Learned about various models, some involving machine learning, that can be used to analyze market data.

Quantitative Trading Intern, Optiver | Chicago, IL

Jun 2021 - Aug 2021

- Excelled in a four-week option theory course and an intern algotrading competition.
- Traded S&P futures and options in a simulated environment with live market data.
- Contributed to a pricing model for index options.

Undergraduate Researcher, MIT Quest for Intelligence | Cambridge, MA

Sep 2020 - Dec 2021

- Optimized neural networks for performing symbolic regression on datasets involving extrapolation.
- Developed an architecture for fitting equations to data governed by parametric and differential equations.
- Investigated the end-to-end training of complex models incorporating symbolic regression networks.

Software Engineering Intern, PayPal | San Jose, CA

May 2020 - Aug 2020

- Built sentiment analysis models to analyze posts on social media and interactions with customer service.
- Created baseline models to validate H2O.ai software for PayPal use.
- Tech stack: Python, Pytorch, NLP, BERT, MLflow, transfer learning.

### **AWARDS**

- USA Computing Olympiad Finalist (top 26 in U.S.)
- USA Math Olympiad Qualifier (score: 15)
- USA Physics Olympiad Silver Medalist
- Putnam Competition Top 500
- Stanford ProCo Grand Prize
- received \$2,500 National Merit Scholarship

## **ADDITIONAL SKILLS**

Computer: Python, Numpy, Pytorch, Pandas, Tensorflow, Java, JavaScript, React.js, Latex

Languages: native proficiency in English, conversational proficiency in Mandarin, basic skills in Spanish