

Qingyang Xu

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Education

Massachusetts Institute of Technology

Ph.D. in Operations Research

Cambridge, MA

08/2018 – 05/2022

Thesis: *Financial and Analytic Innovations for Therapeutic Development*

Advisor: Andrew W. Lo, MIT Sloan School of Management

Stanford University

B.S. in Physics (with Honors), B.S. in Applied Mathematics

Stanford, CA

09/2013 – 06/2017

Graduation Honor: University Distinction (top 15% GPA of graduating class)

Work Experience

LinkedIn

Senior AI Engineer

Mountain View, CA

02/2025 – present

- Fine-tune LLMs to improve the accuracy of people-you-may-know (PYMK) recommendations.
- Train AI models to increase the professional network size of new LinkedIn users by 40%.
- Implement efficient online model inference and reduce LLM computation cost by 30%.

DoorDash

Machine Learning Engineer

San Francisco, CA

08/2023 – 02/2025

- Train AI models to improve the accuracy of food delivery time predictions by 20% (blog post).
- Implement mixed-integer programming methods to optimize dasher assignment and reduce delivery time.

Helm.ai

Research Engineer

Redwood City, CA

01/2023 – 08/2023

- Train Vision Transformer models for object segmentation and classification with 15% higher accuracy.
- Fine-tune foundation models in computer vision for domain-specific object detection tasks.

Meta

Machine Learning Research Scientist

Menlo Park, CA

10/2022 – 01/2023

- Train novel AI models for product recommendation in Meta's virtual reality system.

DAMO Academy, Alibaba Group

Research Intern

Seattle, WA

05/2020 – 08/2020

- Develop AI models via self-supervised learning for anomaly detection and time series forecasting.
- Deploy time-series forecasting models to optimize cloud computing resource allocation.

Selected Publications

1. Estimating Correlations Between Clinical Trial Outcomes Using Generalized Estimating Equations

Co-author, with Yuehao Dai, Andrew W. Lo, Manish Singh, and Ruixun Zhang

Oxford Bulletin of Economics and Statistics, 2025

2. DORADO: Dynamic Optimization of RD Options

Second author, with Zixi Chen, Leonid Kogan, Andrew W. Lo, and Ruixun Zhang

17th Annual Conference on Advances in the Analysis of Hedge Fund Strategies, 2025

3. Use of Bayesian Decision Analysis in the Design of Patient-centered Clinical Trials for Kidney Failure Devices

Co-first author, with Zied Ben Chaouch, Shomesh E. Chaudhuri, et al.

Computers in Biology and Medicine, 2025, 198:111150

4. **Predicting Clinical Trial Duration via Statistical and Machine Learning Models**

Second author, with Joonhyuk Cho, Chi Heem Wong, and Andrew W. Lo

Contemporary Clinical Trials Communications, 2025, 101473

5. **Incorporating Patient Preferences and Burden-of-disease in Evaluating ALS Drug Candidate AMX0035: A Bayesian Decision Analysis Perspective**

First author, with Joonhyuk Cho, Zied Ben Chaouch, and Andrew W. Lo

Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration, 2023, 24(3-4):281-288

6. **Accelerating Vaccine Innovation for Emerging Infectious Diseases via Parallel Discovery**

Leading author, with Joseph Barberio, Jacob Becraft, Zied Ben Chaouch, et al.

Entrepreneurship and Innovation Policy and the Economy, 2023, 2(1):9-39

7. **Real-Time Extended Psychophysiological Analysis of Financial Risk Processing**

Second author, with Manish Singh, Sarah J. Wang, Tinah Hong, Mohammad M. Ghassemi, and Andrew W. Lo

PLOS ONE, 2022, 17(7):e0269752

8. **Identifying and Mitigating Potential Biases in Predicting Drug Approvals**

First author, with Elaheh Ahmadi, Alexander Amini, Daniela Rus, and Andrew W. Lo

Drug Safety, 2022, 45:521-533

9. **Accelerating Glioblastoma Therapeutics via Venture Philanthropy**

Co-first author, with Kien Wei Siah, Kirk Tanner, Olga Futer, John J. Frishkopf, and Andrew W. Lo

Drug Discovery Today, 2021, 26(7):1744-1749

10. **Two-Stage Framework for Seasonal Time Series Forecasting**

First author, with Qingsong Wen and Liang Sun

ICASSP, 2021

11. **Bayesian Adaptive Clinical Trials for Anti-Infective Therapeutics during Epidemic Outbreaks**

Leading author, with Shomesh E. Chaudhuri, Danying Xiao, and Andrew W. Lo

Harvard Data Science Review, 2020, *Special Issue on COVID-19*

12. **Visualizing Probabilistic Models in Minkowski Space with Intensive Symmetrized Kullback-Leibler Embedding**

Co-author, with Han Kheng Teoh, Katherine N. Quinn, Jaron Kent-Dobias, Colin B. Clement, and James P. Sethna

Physical Review Research, 2020, 2:03321

Patent

Next-gen ETA machine learning (ML) system, US Patent App. 19/067,414

Novel embedding-based AI model architecture and software system to predict food delivery time

Book

The Algorithmic World (Monograph)

Shanghai Educational Publishing House, 2025

ISBN 978-7-5720-3626-2

Peer Review Service

Journals

- ACM Transactions on Intelligent Systems and Technology (TIST)
- Journal of Data-centric Machine Learning Research (DMLR)
- ACM Transactions on Knowledge Discovery from Data (TKDD)
- IEEE Transactions on Neural Networks and Learning Systems (TNNLS)
- IEEE Transactions on Intelligent Vehicles (TIV)
- IEEE Transactions on Knowledge and Data Engineering (TKDE)

Conferences (past 12 months)

- CVPR 2025
- NeurIPS 2025
- ICML 2025
- AAAI 2025
- ICLR 2025
- KDD 2025

Honors & Awards

- 2nd Place, MIT FinTech Datathon 02/2019
- David S. Levine Award, Stanford University Department of Physics 06/2016
- Undergraduate Major Research Grant, Stanford University 04/2016 – 06/2017
- University Distinction, Stanford University 06/2017
- Stanford Fund Scholarship, Stanford University 09/2013 – 06/2017
- Cornell Graduate Fellowship, Cornell University 08/2017 – 05/2018