Xiao-Yue Gong

xygong@mit.edu | www.mit.edu/∼xygong/

EDUCATION
<div align="right">

GRE: 337/340; **GRE Math Subject:** 900
</div>

Massachusetts Institute of Technology	2017.8-present Cambridge
Operations Research (Ph.D)	GPA: 5.0/5.0
New York University Shanghai	2013.6-2017.5 Shanghai
Honors Mathematics (B.S.), Interactive Media Arts (B.S.)	summa cum laude
New York University	2015.8-2017.1 New York
Budapest Semesters in Mathematics	2015.6-2015.8 Budapest
Tel Aviv University Business Entrepreneurship Program	2014.6-2014.7 Tel Aviv

SELECTED AWARDS

• MIT LIDS Student Conference 2019 Best Presentation Award	LIDS
• Tech for Truth Hackathon Supply Chain Grand Prize 2019	Lockheed Martin
• MIT Bitcoin Hackathon 2018 ARCC Prize	Asia Reserve Currency Coin
• MIT IDEAS Global Challenge 2018 winner	MIT
• 1 of 14 shortlisted finalists for Rhodes Scholarships (China)	The Rhodes Trust
• Provost's Award 2017	NYU Shanghai
• 2016 United Nations Youth Assembly Resolution Fellowship	The Resolution Project
• President's Service Award 2016	NYU
• NYU Reynolds Changemaker Challenge Champion 2015	NYU
• CPB Scholarship 2014	Israeli Government

RESEARCH

1. Online Assortment Optimization with Reusable Resources. With Vineet Goyal, Garud Iyengar, David Simchi-Levi, Rajan Udwani and Shuangyu Wang. (under Minor Revision for Management Science).

2. Provably More Efficient Q-Learning in the Full-Feedback/One-Sided-Feedback Settings. With David Simchi-Levi. *ICML 2020 Theoretical Foundations of Reinforcement Learning workshop*.

3. Provably Efficient Reinforcement Learning for Episodic Stochastic Inventory Control Models. May 2020. With David Simchi-Levi (in preparation).

4. A Fast Max Flow Algorithm. With Jim Orlin. *Networks 2020*.

5. Optimal Ex Post Auctions for Bidders with Interdependent Value Distributions (in preparation).

6. Efficient Entropy For Policy Gradient with Multi-Dimensional Action Space. With Yiming Zhang, Quan Ho Vuong, Kenny Song, Keith W. Ross. April 2018, *ICLR Workshop*, Vancouver.

I have reviewed for journal: IEEE Transactions on Network Science and Engineering.

PROFESSIONAL

Research Intern, Microsoft Research	2020.5-2020.8 Redmond

Research intern at Microsoft Research AI CORE group. Conducted research on learning and optimization for cloud service supply chain.

Quantitative Analyst Intern, D.E. Shaw & Co. 2019.5-2019.8 New York

Quantitative research intern in the Quant Commodities group.

Research Assistant, NYU Shanghai 2017.6-2017.8 Shanghai

Conducted theoretical reinforcement learning research in the NYU Shanghai Computer Science Lab.

President, New York University Mathematics Society 2016.5-2017.1 New York

Arranged weekly seminars. Made yearlong plan and raised the club budget received by 17%. Allocated tasks and managed the executive board. Organized participation in math conferences and competitions.

Founder, Aeolian 2015.9-2019.5 New York & Cambridge

Founded a smart indoor air-purificatin/monitoring social venture. Managed the team and the product development. Aeolian received over $20,000 from winning competitions.

Co-Organizer, HackShanghai 2014.5-2014.12 Shanghai

Inaugurated HackShanghai, the largest international college hackathon in China. Hardware support and legal support, and collaboratively responsible for sponsorship, marketing and operations.

Legal Summer Intern, Citibank (China headquarters) 2014.7-2014.9 Shanghai

Conducted legal research on topics including Anti-Bribery Cases, bank regulations, Free Trade Zone, etc. Prepared transaction summaries and litigation case updates.

TEACHING

Teaching Assistant, MIT 2020.2-2020.5 Cambridge

Teaching assistant for 15.077 Statistical Learning and Data Mining. Students were a mixture of PhDs, MBAs, masters and undergrads.

Instructor, MIT 2019.1-2019.1 Cambridge

Co-instructed PhD/master level course 15.S60 Computing in Optimization & Statistics, and undergrad course 15.S41 Software Tools for Business Analytics.

TA/Tutor/Grader, NYU Courant Institute of Mathematical Sciences 2015.10-2017.1 New York

TA/tutor/grader for Calculus I, Linear Algebra, Introduction to Web Development & Programming.

PUBLIC OUTREACH

Presenter, MIT Women's Initiative 2017.11-2018.1 Cambridge & Texas

Presented at multiple middle/high schools in Texas to encourage young girls to explore further studies and careers in STEM.

Vice President, NYU Shanghai XLS Dance Club 2013.10-2015.5 Shanghai

Set up volunteer dance workshops at the Renewal Center for homeless people, and Okiki Kindergarten. Registered visitors and handed out clean clothes and toothbrushes. Organized cash and clothes donations for the Renewal Center from NYU Shanghai.

Workshop Instructor, MakeForKids 2014.1-2015.8 Shanghai

Designed and instructed STEM craft workshops to help young children learn to build electronic projects.

LANGUAGES:

Proficient: Python, Julia. **Some experience:** R, C++.