Tao Ma

CONTACT INFORMATION	🏠 xiaobaobaochifan.github.io	💼 linkedin.com/in/tao-ma-93642013a
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EDUCATION

London School of Economics and Political Science (LSE)   Sep 2021 – Aug 2025
Ph.D. Candidate in Statistics (Data Science Group)   London

New York University (NYU) | Courant Institute   Sep 2016 – Aug 2018
Master of Science in Mathematics   New York
GPA 3.81/4.00 (Top 5) | Passed the Ph.D. Written Qualification Exam

Hong Kong Baptist University (HKBU)   Sep 2012 – Aug 2016
Bachelor of Science in Statistics and Operations Research (Science Elite Program)   Hong Kong
GPA 3.87/4.00 (Rank 1/61 in the Math Department)

RELEVANT COURSEWORK

Reinforcement Learning, Game Theory, Stochastic Analysis, Survival Analysis, Nonparametric Statistics, Time Series, Categorical Data, Numerical Methods, Linear Programming, Topology, Differential Equations, Real/Complex/Functional Analysis, Information Theory, Mathematical Foundations of Computing, Natural Language Processing with Deep Learning

PUBLICATIONS AND PREPRINTS

Ma, T., Yang, X., & Szabó, Z. (2024). To Switch or not to Switch? Balanced Policy Switching in Offline Reinforcement Learning. arXiv preprint arXiv:2407.01837. 📄

Ma, T., & Yang, X. (2024). A Framework for Policy Evaluation Enhancement by Diffusion Models. Tiny Papers **ICLR**. (**Invite to present**) 📄

Ma, T., Zhu, J., Cai, H., Qi, Z., Chen, Y., Shi, C., & Laber, E. B. (2023+). Sequential Knockoffs for Variable Selection in Reinforcement Learning. arXiv preprint arXiv:2303.14281. (SEEK) 📄

SELECTED ACHIEVEMENTS

- LSE Class Teacher Award   2022 – 2023
- LSE PhD Studentship (the highest honor for graduate students)   2021 – 2025
- Best Teaching Assistant Award (HKUST)   2019 – 2020
- HKSAR Government Scholarship (the highest honor for undergraduates in HK)   2013 – 2016
- Outstanding Student Award (7/4134, by The Baptist Convention of HK)   2015 – 2016
- Scholastic Award   2015 – 2016
- APEC Scholarship (by Asia Pacific Economic Cooperation)   2014 – 2016
- Best Debater prize at The World Mandarin Debating Championship, HK   2015 – 2016
- Summer Undergraduate Research Fellowship   2014 – 2015
- Mr. Li Men Jan Prize in Mathematics   2014 – 2015
- Department of Mathematics Outstanding Academic Performance Award   2013 – 2014
- Sir Tseng Chi Lu Scholarship   2013 – 2014
- President's Honour Roll   2012 – 2016

SKILLS

Python, R, SAS, MATLAB, LaTeX, HTML, CSS, JavaScript, Bash, PyTorch, Jupyter Notebook, VS Code, Linux, Git, Google Cloud Platform, local high-performance computing management

ACADEMIC SERVICE	**LSE Statistics Research Showcase**	Apr 2025
	Session Chair	
	Neural Information Processing Systems (NeurIPS)	Jun 2025 – Sep 2025
	Reviewer (main track submissions)	
	International Conference on Machine Learning (ICML)	Feb 2025 – May 2025
	Reviewer (main track submissions)	
	International Conference on AI and Statistics (AISTATS)	Sep 2024 – Jan 2025
	Reviewer (main track submissions)	
	International Conference on Learning Representations (ICLR)	Sep 2024 – Jan 2025
	Reviewer (main track submissions)	
	Neural Information Processing Systems (NeurIPS)	Jun 2024 – Sep 2024
	Reviewer (main track submissions)	
	London School of Economics and Political Science	London
	Committee member	

- Department Review Representative — 2024
- Department Teaching Committee — 2023 – Present
- Department Moving Plan Committee — 2023 – Present

ACADEMIC EXPERIENCE	**London School of Economics and Political Science**	Sep 2021 – Present
	Class Teacher	London

- **Undergraduate courses**:
  - ◇ ST101 Programming for Data Science (Python) — Sep 2022 – Dec 2024
    Numpy, Pandas, testing, object-oriented programming, functional programming
  - ◇ ST107 Quantitative Methods — Jan 2022 – May 2022
    Introductory statistics for students in social science
  - ◇ ST102/109/110 Elementary Statistical Theory — Sep 2022 – May 2025
    One-year rigorous course in probability and statistics
- **Graduate courses**:
  - ◇ ST445 Managing & Visualizing Data (Python) — Sep 2021 – Dec 2021
    Pandas, BeautifulSoup, Sklearn, Jupyter Notebook

	Hong Kong University of Science and Technology (HKUST)	Oct 2018 – Nov 2019
	Research Assistant	Hong Kong

- Mathematical physics, partial differential equations and signal processing of robots.

Class teacher — Hong Kong

- MATH 2011 Introduction to Multivariable Calculus

	New York University	Sep 2017 – Dec 2017
	Recitation Leader	New York

- MATH-UA 211 Mathematics for Economics: calculus with economic theory.

INDUSTRIAL EXPERIENCE	**Bank of China**	Dec 2014 – Jan 2015
	Internship – Corporate Banking and Financial Institute	Hong Kong

OTHER PROFESSIONAL EXPERIENCE	**University Mandarin Debate Team**	Sep 2012 – Aug 2016
	President, coach	Hong Kong

- Organized weekly training sessions, managed administrative tasks, participated in international competitions and gave 3-round interviews to around 100 applicants each year.

	Professional Swimming	2004 – 2009
	Individual Medley (200 meters), Breaststroke (100 meters), Butterfly Stroke (100 meters)	Beijing

LANGUAGES   Mandarin (native), English (fluent), Cantonese (fluent)

INTERESTS   Basketball, calligraphy and music

GAMES   Poker, Mahjong, Pokémon, Mario, Kirby, Dragon Ball, NBA 2K, Asphalt, FIFA, Horizon 4, Zelda, GTA 5 and a lot of others