Tao Ma

CONTACT INFORMATION	lse.ac.uk/statistics/people/tao-ma linkedin.com/in/tao-ma-93642013a t.ma9@lse.ac.uk xiaobaobaochifan.github.io

EDUCATION

London School of Economics and Political Science — Sep 2021 – Jan 2026
Ph.D. Candidate in Statistics (Data Science Group) — London

New York University | 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 — 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	**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
Committee member London
- Department Review Representative 2024
- Department Teaching Committee 2023 – Present
- Department Moving Plan Committee 2023 – Present

ACADEMIC **London School of Economics and Political Science** Sep 2021 – Present
EXPERIENCE Class Teacher London
- **Undergraduate courses**:
  - ◇ ST101 Programming for Data Science (Python) Sep 2022 – Present
    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 – Present
    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 Oct 2018 – Nov 2019
Research Assistant Hong Kong
- Mathematical physics, partial differential equations and signal processing of robots.

New York University Sep 2017 – Dec 2017
Recitation Leader New York
- MATH-UA 211 Mathematics for Economics: calculus with economic theory.

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

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