Yuanmo He

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Data scientist with 5+ years of experience designing and executing data-driven research projects using large-scale behavioural data. Proficient in Python for general-purpose programming, with solid experience in R, SQL, and Spark for statistical analysis and data querying. Adept at translating complex analyses into actionable insights for technical and non-technical audiences. Eager to apply these skills to inform product strategy, improve user experience, and drive measurable impact at scale.

EXPERIENCE

Postdoctoral Fellow in Advanced Quantitative Methods, The London School of Economics (LSE) 09/2024 - present

- Supervised master's dissertations applying Generative AI to study topics such as identity construction and algorithmic bias, advising on study design, model evaluation, and interpretation of results.
- Taught Computer Programming, Social Network Analysis, and Applied Regression Analysis, earning an average rating of 4.5/5. 09/2020 - 09/2024

Doctoral Researcher in Social Data Science, LSE

- Led end-to-end research projects using large-scale digital trace data to study socioeconomic inequality in daily behaviour and social interactions, applying machine learning, natural language processing, causal inference, and social network analysis.
- Designed and validated a theory-informed unsupervised method to infer the socioeconomic status (SES) for 3.5M Twitter users, demonstrating how social and behavioural insights can enable scalable user segmentation for downstream analysis.
- Designed and executed guasi-experiments with observational data to evaluate the effects of SES on Twitter user behaviour.
- Applied NLP and LLM methods to examine differences in social interactions on Twitter between high- and low-SES Twitter users. Analysed mobile-tracking data to uncover patterns in consumption behaviour across socioeconomic groups, using regression,
- embeddings, clustering, and community detection methods.
- Designed and built scalable ETL pipelines leveraging cloud computing, parallel processing and API integrations. Presented research at leading academic conferences, including the International Conference on Computational Social Science
- and the Annual Meeting of the American Sociological Association.
 - Awarded an honourable mention at the 2023 International Conference on Computational Social Science. \circ
- Peer-reviewed Publication: Yuanmo He and Milena Tsvetkova. 2023. A Method for Estimating Individual Socioeconomic Status of Twitter Users. Sociological Methods & Research. https://doi.org/10.1177/00491241231168665
 - Journal Impact Factor 6.5; top journal in quantitative social science and sociology. 0
 - Paper Altmetric score 78; the top trending paper published in the journal from 2023 until June 2025 (OOIR link). 0
- Preprint: Yuanmo He and Milena Tsvetkova. 2025. High Socioeconomic Status is Associated with Diverse Consumption across Brands and Price Levels. arXiv. https://doi.org/10.48550/arXiv.2506.13840

Seminar Leader/Graduate Teaching Assistant, LSE

- Courses: Computer Programming, Applied Machine Learning, Introduction to Data Science and Machine Learning.
- Communicated theoretical concepts and practical implementations of computer programming, machine learning, and natural language processing to students from diverse academic, technical, and cultural backgrounds.
- Delivered daily 1.5-hour computer lab sessions to two classes of 20+ students on understanding and performing machine learning and natural language processing with R during an intensive three-week LSE summer school course.
- Facilitated weekly/biweekly 1.5/2-hour computer lab teaching to classes of 30+ students on programming and machine learning.

EDUCATION AND HONORS

PhD Social Research Methods (Passed viva with no corrections), LSE

Granted the LSE PhD Studentship for four years (£140,000).

MSc Applied Social Data Science (Distinction), LSE

Distinction in all modules: Computer Programming, Applied Machine learning, Quantitative Text Analysis, Data for Data Scientists, Multivariate Analysis and Measurement, Fundamentals of Social Science Research Design, Capstone Project.

BSc Social Sciences (First Class Honours), University College London (UCL)

- Awarded the UCL Institute of Education Faculty Medal (the best final year undergraduate student in the faculty).
- Achieved the highest final grade of all graduates in the Social Research Institute.
- Relevant modules: Quantitative Research Methods, Causal Analysis, Social Networks, Game Theory, Social Psychology

Additional training and certificates

- Al Safety Fundamentals-Alignment, BlueDot Impact, 2025
- Generative AI with Large Language Models, DeepLearning.AI, 2024
- Complex Systems Summer School, Santa Fe Institute, 2023
- Inequality Across Scales, Space, Time, Domains, The Abdus Salam International Centre for Theoretical Physics, 2023

SKILLS AND INTERESTS

Programming language & statistical software: Python, R, SQL, Spark, Git, Stata, SPSS, Microsoft Excel.

Methods: machine learning, natural language processing, LLM, causal inference, social network analysis, multivariate analysis. Languages: Chinese (native), English (bilingual).

Stand-up Comedy: Performed at diverse settings (parties, academic workshops, comedy clubs). Getting into the comedy club scene. Writing: Writing a blog on things that I find interesting at yuanmohe.substack.com

09/2021 - 04/2023

09/2020 - 09/2024

09/2019 - 09/2020

09/2016 - 06/2019