

Yingrong Mao

[Website](#) | 347-409-4525 | yingrong@uchicago.edu

EDUCATION

The University of Chicago, Chicago, IL <i>Master of Arts, Computational Social Science</i> Full-time Pre-Doctoral Research Fellow, Northwestern University (Apr. 2025 – Mar. 2026)	2023 – 2026 GPA: 3.96
New York University & NYU Shanghai <i>Bachelor of Science, Double Major in Data Science & Social Science</i>	2018 – 2022 GPA: 3.63

WORKING PAPERS

- *Academic Simulacra: Forecasting Research Ideas through Multi-Agent LLM Simulations*, Jiwoong Choi*, **Yingrong Mao***, Donghyun Kang, and James Evans (*equal contribution)
- *Language Models Surface the Unwritten Code of Science and Society*, [Link](#), Honglin Bao, Siyang Wu*, Jiwoong Choi*, **Yingrong Mao***, and James Evans (*equal contribution)
- *Meme Adaptability and Popularity: Investigating the Evolutionary Dynamics of Internet Meme Templates*, **Yingrong Mao** (MA thesis, under the supervision of Prof. Bernard Koch)

CONFERENCES & PRESENTATIONS

- *Meme Adaptability and Popularity: Investigating the Evolutionary Dynamics of Internet Meme Templates*, International Conference on Computational Social Science (IC2S2), parallel session, Norrköping, Sweden, 2025
- *Academic Simulacra: Forecasting Research Ideas through Multi-Agent LLM Simulations*, International Conference on the Science of Science and Innovation (ICSSI), poster, Copenhagen, Denmark, 2025
- *Meme Adaptability and Popularity: Investigating the Evolutionary Dynamics of Internet Meme Templates*, Computational Social Science Student Poster Session, poster, The University of Chicago, Chicago, 2024

RESEARCH EXPERIENCE

Visiting Pre-Doctoral Research Fellow Apr 2025 – Present
The Center for Science of Science & Innovation (PI: Prof. Dashun Wang), Northwestern University, Evanston, IL

- Conducted large-scale computational analyses of the research pivot penalty, replicating and extending prior studies using Dimensions data
- Investigated the short-term vs. long-term dynamics of pivot penalties across domains (science, art, and film), examining author roles, team composition, and career trajectories
- Calculated pivot size for new research direction on success-failure pivots

Research Affiliate Sep 2024 – Present
Knowledge Lab (PI: Prof. James Evans), The University of Chicago, Chicago, IL

- Collaborated on projects about multi-agent LLM simulations and LLM hypothesis generation that examine how large language models capture and structure scientific knowledge
- Participated in weekly lab meetings and computational social science workshops, contributing to and receiving feedback on ongoing projects

Research Assistant (Supervisor: Prof. Bernard Koch) Dec 2024 – Mar 2025
Social Science Division, The University of Chicago, Chicago, IL

- Built automated pipelines to collect and analyze Reddit data to study cross-community content diffusion and knowledge flow patterns
- Implemented API-based tools for large-scale sentiment analysis, integrating automated querying, processing, and statistical evaluation of text data

Research Assistant (Supervisor: Prof. Matteo Tranchero) Jul 2024 – Dec 2024
Data Innovation Lab, University of California, Berkeley (remote)

- Designed and implemented a NK fitness landscape simulation model to emulate scientific discovery, using Python and R for model construction, analysis, and visualization
- Conducted high-volume data cleaning and integration of PubMed datasets to prepare empirical data for subsequent analysis

Independent Researcher (Supervisor: Prof. Alex Barnard) Jun 2022 – Sep 2022
NYU Dean's Undergraduate Research Program, New York University, New York

- Conducted an independent funded ethnographic study on Zen meditation communities in New York, including field observation across three centers and six in-depth interviews

FELLOWSHIPS & AWARDS

-
- | | |
|---|-------------|
| • Maroon Research Scholarship (Merit) – \$50,000, The University of Chicago | 2023 – 2025 |
| • New York University Dean's Undergraduate Research Fund – RMB ¥7000 | 2022 |

ACTIVITIES & SERVICE

-
- Reviewer, ACM Collective Intelligence, 2025
 - Finalist (Top 20 / 295 Teams), AgentSociety Challenge (The Web Conference 2025) — LLM multi-agent simulation competition

INDUSTRY EXPERIENCE

Seed Talent Program | Shanghai, China Jun 2021 – Oct 2021
Assistant Director & Project Manager

- Co-led recruitment (60+ interviews) and managed a team of 30+ students
- Organized events and operational logistics, including the 15th cohort graduation ceremony

Yuanyuzhou Ventures | Shanghai, China Jan 2021 – Jul 2021
Analyst Intern

- Monitored and analyzed blockchain on-chain transaction data and visualized market trends
- Conducted financial modeling and due diligence for 10+ projects, with investment reports

China Financial Information Center | Shanghai, China Jul 2020 – Sep 2020
Project Intern

- Edited and published 200+ financial articles on platforms such as Toutiao and East Money
- Supported business conferences and produced post-event analytical summaries

SKILLS & COMPETENCIES

-
- Computational Methods: Network Analysis, Agent-Based Modeling, Statistical Inference, Natural Language Processing, Machine Learning, LLM-Based Analysis
 - Programming: Python, R, SQL, HPC (Slurm), AWS (EC2, S3), Git
 - Languages: Chinese (native), English (fluent)