

Yongchao Ma

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Education

- 2022–2026 **University of Michigan, Ann Arbor, USA**
Ph.D. in Survey and Data Science, expected May 2026
Dissertation: *On effective and efficient survey data collection at the crossroads of statistics and AI*
Committee: James Wagner (Chair), Brady T. West, Michael Traugott, Barry Schouten
- 2019–2021 **Utrecht University, The Netherlands**
M.Sc. in Methodology and Statistics, *cum laude*
Track: European Master in Official Statistics, with internship at Statistics Netherlands
Thesis: *Optimal stratification in Bayesian adaptive survey design*
Supervisors: Nino Mushkudiani, Barry Schouten
- 2018–2019 **Linköping University, Sweden**
One-term graduate exchange, Computational Social Science
- 2017–2019 **University of Macau, Macao SAR**
M.S.Sc. in Criminology and Criminal Justice

Grants & Fellowships

- Winter 2026 Rackham One-Term Dissertation Fellowship, \$13,770 + Tuition & Fees
Rackham Graduate School, University of Michigan
- 2024–2025 Charles Cannell Fund in Survey Methodology, \$10,000
Institute for Social Research Next Generation Initiative, University of Michigan
Project: *Leveraging survey variables to estimate response propensity in Bayesian adaptive survey design: a simulation study*

Honors & Awards

2025	Rackham Conference Travel Funding, University of Michigan
2024	Rackham Conference Travel Funding, University of Michigan
2023	Student Travel Grant, Program in Survey and Data Science, University of Michigan
2023	Student Fellowship, Midwest Association for Public Opinion Research
2018	Outgoing Exchange Scholarship, University of Macau

Publications

REFEREED JOURNAL ARTICLES

2025	Ma, Y. , Mushkudiani, N., & Schouten, B. (2025). An optimal stratification method for addressing nonresponse bias in Bayesian adaptive survey design. <i>Sociological Methods & Research</i> . https://doi.org/10.1177/00491241251345463
2024	West, B. T., Ma, Y. , Lankenau, S., Wong, C. F., Bonar, E. E., Patrick, M. E., Walton, M. A., & McCabe, S. E. (2024). Latent transition analysis of time-varying cannabis use motives to inform adaptive interventions. <i>Psychology of Addictive Behaviors</i> , 38(7), 759–771. https://doi.org/10.1037/adbo001012
2021	Van De Schoot, R., De Bruin, J., Schram, R., Zahedi, P., De Boer, J., Weijdemans, F., Kramer, B., Huijts, M., Hoogerwerf, M., Ferdinands, G., Harkema, A., Willemsen, J., Ma, Y. , Fang, Q., Hindriks, S., Tummers, L., & Oberski, D. L. (2021). An open source machine learning framework for efficient and transparent systematic reviews. <i>Nature Machine Intelligence</i> , 3(2), 125–133. https://doi.org/10.1038/s42256-020-00287-7

Work Submitted for Publication

Ma, Y., West, B. T., & McCabe, S. E. (submitted). Daily web survey data collection of time-varying cannabis use motives and contexts, with implications for adaptive interventions: A pilot study.

Presentations

CONFERENCE PRESENTATIONS

2025	Ma, Y. (2025b, May 14–16). <i>Replacing nonresponse modeling with active learning on AI-generated textual descriptions of sample units for efficient survey data collection</i> [Paper presentation]. 80th Annual Conference of the American Association for Public Opinion Research, St. Louis, MO, United States. https://aapor.confex.com/aapor/2025/meetingapp.cgi/Paper/3983
2025	Ma, Y. (2025c, July 14–18). <i>Stratification method for identifying subgroups requiring different survey data collection strategies</i> [Paper presentation]. 11th Conference of the European Survey Research Association, Utrecht, The Netherlands.
2025	Ma, Y. , & Traugott, M. (2025, July 14–18). <i>Survey attitudes and privacy concerns: Measurement invariance across Germany, the Netherlands, and the United States</i> [Paper presentation]. 11th Conference of the European Survey Research Association, Utrecht, The Netherlands.

- 2025 Traugott, M., & **Ma, Y.** (2025a, February 26–28). *Motivated reasoning and acceptance of poll results on a health policy issue* [Paper presentation]. 7th Current Innovations in Probability-based Household Internet Panel Research Conference, Washington, DC, United States. <https://dornsife.usc.edu/cesr/wp-content/uploads/sites/54/2025/03/3-Traugott-CIPHER-Presentation-V1.pdf>
- 2025 Traugott, M., & **Ma, Y.** (2025b, May 14–16). *The relationship between public understanding of polls and their credibility* [Paper presentation]. 80th Annual Conference of the American Association for Public Opinion Research, St. Louis, MO, United States. <https://aapor.confex.com/aapor/2025/meetingapp.cgi/Paper/3678>
- 2025 Traugott, M., & **Ma, Y.** (2025c, May 12–15). *The role of polls in a democratic society* [Paper presentation]. 78th Annual Conference of the World Association for Public Opinion Research, St. Louis, MO, United States.
- 2024 **Ma, Y.** (2024, May 15–17). *Leveraging survey variables to estimate response propensity in Bayesian adaptive survey design: A simulation study* [Paper presentation]. 79th Annual Conference of the American Association for Public Opinion Research, Atlanta, GA, United States. <https://aapor.confex.com/aapor/2024/meetingapp.cgi/Paper/2469>
- 2024 **Ma, Y.**, West, B. T., & McCabe, S. E. (2024, May 15–17). *Daily web survey data collection to improve health: Temporal dynamics of cannabis use motives and context, with implications for adaptive interventions* [Paper presentation]. 79th Annual Conference of the American Association for Public Opinion Research, Atlanta, GA, United States. <https://aapor.confex.com/aapor/2024/meetingapp.cgi/Paper/2816>
- 2023 **Ma, Y.**, & Miller, P. V. (2023, November 17–18). *Leveraging survey variables to estimate response propensity in Bayesian adaptive survey design: A simulation study* [Paper presentation]. 48th Annual Conference of the Midwest Association for Public Opinion Research, Chicago, IL, United States.
- 2021 **Ma, Y.**, Mushkudiani, N., & Schouten, B. (2021a, December 1–3). *An optimal stratification approach for addressing nonresponse bias in Bayesian adaptive survey design* [Paper presentation]. 7th International Workshop on Advances in Adaptive and Responsive Survey Design, Online.
- 2021 **Ma, Y.**, Mushkudiani, N., & Schouten, B. (2021b, July). *An optimal stratification approach for addressing nonresponse bias in Bayesian adaptive survey design* [Paper presentation]. 9th Conference of the European Survey Research Association, Online. https://www.europeansurveyresearch.org/conf2021/uploads/57/3653/67/Ma_ESRA21.pdf

INVITED TALKS

- 2025 **Ma, Y.** (2025a, October 31). *From Text to Tidy: Reproducible LLM Deployment and Batch Prompt Processing*. Survey Methodology Lab Meeting, Program in Survey and Data Science, University of Michigan, Ann Arbor, MI, United States.
- 2022 **Ma, Y.** (2022, July 1). *Human-centered AI through reliable graphical user interfaces*. 1st ASReview Users Meeting, Utrecht, The Netherlands.

Teaching

TEACHING AT THE GRADUATE LEVEL

Summer 2024

University of Michigan, Ann Arbor

Sampling Program for Survey Statisticians, Survey Research Center, Institute for Social Research

Teaching Assistant

SURVMETH 614: Analysis of Complex Sample Survey Data

SURVMETH 616: Workshop in Survey Sampling Techniques

SURVMETH 625: Methods of Survey Sampling

Guest Lecturer

SURVMETH 614: Analysis of Complex Sample Survey Data

- Logistic regression analysis
- Multilevel models

AREAS OF TEACHING INTEREST

- Computational Sociology
- Measurement and Data Collection
- Structural Equations with Latent Variables
- Experimental Design in Sociology
- Data Collection Methods
- Bayesian Statistics
- Psychometrics
- Statistical Programming with R

Public Scholarship

2026

forthcoming

Sage Video *Survey Research Collection*, Sage Publishing

- Invited interview on practical application of survey methods—stages, process, challenges, and lessons learned—produced for university-level teaching

2025

forthcoming

Podcast Series on Survey Research, European Survey Research Association

- Invited conversation on my conference paper alongside discussion of top research priorities and overlooked domains in survey research

Software Development

MAINTAINER

[asreview](#) ASReview: Active learning for systematic reviews. An open-source machine learning tool for efficient, transparent, and interactive screening of large textual datasets.

[asreview-wordcloud](#) Wordclouds: A tool to create a visual impression of the verbal content within a systematic review dataset

Professional Service

2024 Referee for *American Journal of Preventive Medicine*
2025 Referee for *Demography*

Professional Affiliations

MEMBERSHIPS

2024 American Association for Public Opinion Research
2023 Midwest Association for Public Opinion Research
2021 European Survey Research Association
2018 Asian Criminological Society