Yongchao Ma

Institute for Social Research University of Michigan 426 Thompson St. Ann Arbor, MI 48109-1428 USA

Email: ytma@umich.edu Website: yongchaoma.com







Education

University of Michigan, Ann Arbor, USA 2022-2026

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

Utrecht University, The Netherlands 2019-2021

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

Linköping University, Sweden 2018-2019

One-term graduate exchange, Computational Social Science

University of Macau, Macao SAR 2017-2019

M.S.Sc. in Criminology and Criminal Justice

Grants & Fellowships

Rackham One-Term Dissertation Fellowship, \$13,770 + Tuition & Fees Winter 2026

Rackham Graduate School, University of Michigan

Charles Cannell Fund in Survey Methodology, \$10,000 2024-2025

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

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

Publications

2024

2021

2025

2025

2025

Refereed Journal articles

- Ma, Y., Mushkudiani, N., & Schouten, B. (2025). An optimal stratification method for addressing nonresponse bias in Bayesian adaptive survey design. *Sociological Methods & Research*. https://doi.org/10.1177/00491241251345463
 - 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. *Psychology of Addictive Behaviors*, 38(7), 759–771. https://doi.org/10.1037/adb0001012
 - Van De Schoot, R., De Bruin, J., Schram, R., Zahedi, P., De Boer, J., Weijdema, 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. *Nature Machine Intelligence*, 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

- Ma, Y. (2025b, May 14–16). Replacing nonresponse modeling with active learning on AI-generated textual descriptions of sample units for efficient survey data collection [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
- Ma, Y. (2025c, July 14–18). Stratification method for identifying subgroups requiring different survey data collection strategies [Paper presentation]. 11th Conference of the European Survey Research Association, Utrecht, The Netherlands.
- Ma, Y., & Traugott, M. (2025, July 14–18). Survey attitudes and privacy concerns: Measurement invariance across Germany, the Netherlands, and the United States [Paper presentation]. IIth Conference of the European Survey Research Association, Utrecht, The Netherlands.

- 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
- 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
- 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.
- 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
 - 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
- 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.
 - 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.
- 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

2024

2021

- 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.
- 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

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

Referee for Demography 2025

Referee for American Journal of Preventive Medicine 2024

Professional Affiliations

Memberships

2024	American Association for Public Opinion Research
2023	Midwest Association for Public Opinion Research
202I	European Survey Research Association
2018	Asian Criminological Society