

YONGCHAO MA

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RESEARCH INTERESTS

Adaptive Survey Design, Survey Nonresponse, Human-Computer Interaction, Software Engineering

EDUCATION

Utrecht University, The Netherlands

May 2021

M.Sc. in Methodology and Statistics (With Highest Distinction)

Track: European Master in Official Statistics (EMOS)

University of Macau, Macau

Jun 2019

M.S.Sc. in Criminology and Criminal Justice

Linköping University, Sweden

Jan 2019

Exchange, Computational Social Science

PROFESSIONAL EXPERIENCE

Utrecht University

Research Engineer

Aug 2021 - Present

Utrecht, The Netherlands

- Design and develop the front-end user interface for ASReview LAB, an open-source AI-based software that helps researchers accelerate the screening of textual data for systematic reviews and meta-analyses as efficiently and transparently as possible
- Develop REST APIs to communicate between the front-end and back-end of the software

Utrecht University

Graduate Research Assistant

Feb 2020 - Jul 2021

Utrecht, The Netherlands

- Pre-process the metadata of the benchmark systematic review datasets for ASReview LAB
- Develop wordclouds for visualizing keywords in the article titles/abstracts in a systematic review dataset
- Web application front-end (React JavaScript) and back-end (Python Flask) development training

Statistics Netherlands

Intern Methodologist

Sep 2020 - Jul 2021

The Hague, The Netherlands

- Develop a methodology under Bayesian analysis to stratify the target population into subgroups and assign different data collection strategies to them
- Validate the effectiveness of the methodology in reducing survey nonresponse bias

PEER-REVIEWED JOURNAL ARTICLES

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](#). *Nature Machine Intelligence*, 3(2), 125-133.

SUBMITTED PAPERS

Ma, Y., Mushkudiani, N., Schouten, B., (Under Review). An optimal stratification approach for addressing nonresponse bias in Bayesian adaptive survey design. *Submitted to Journal of the Royal Statistical Society: Series A*, April 2022.

CONFERENCE PRESENTATIONS

Ma, Y., Mushkudiani, N., Schouten, B., 2021. An optimal stratification approach for addressing nonresponse bias in Bayesian adaptive survey design. Paper presented at 7th International Workshop on Advances in Adaptive and Responsive Survey Design.

Ma, Y., Mushkudiani, N., Schouten, B., 2021. [Optimal stratification in Bayesian adaptive survey designs](#). Paper presented at the European Survey Research Association Conference.

Ma, Y., 2016. The change of the sociopolitical attitudes of the middle class in China: 2003–2013. Paper presented at the Annual Meeting of the Chinese Sociological Association.

INVITED TALKS

Ma, Y., 2022. [Human-centered AI through interactive user interfaces](#). The 1st ASReview Users Meeting, Jul 1, Utrecht, The Netherlands.

SOFTWARE DEVELOPMENT

[asreview](#) ASReview: Active learning for systematic reviews (Maintainer)

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

HONORS & AWARDS

Outgoing Exchange Scholarship, University of Macau	<i>May 2018</i>
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CERTIFICATES

Python for Everybody Specialization by University of Michigan	<i>Apr 2016</i>
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National Computer Rank Examination of China, Level 4 (Network Engineering)	<i>Sep 2015</i>
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National Computer Rank Examination of China, Level 3 (Computer Network)	<i>Mar 2015</i>
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National Computer Rank Examination of China, Level 2 (C Programming Language)	<i>Sep 2014</i>
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TECHNICAL SKILLS

Programming Language	R, Python, JavaScript, HTML, CSS, SQL, Markdown
Statistical Software	SPSS, Stata, HLM, Mplus, JAGS
Other Software	git, L ^A T _E X

PROFESSIONAL AFFILIATIONS

Asian Criminological Society

European Survey Research Association