

# Wenqing Qian

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EDUCATION	<b>Survey and Data Science, Master of Science</b> <i>August 2022 - Exp. April 2024</i> Institute for Social Research, University of Michigan, Ann Arbor, United States
	<b>Statistics, Bachelor of Science</b> <i>April 2019 - June 2022</i> School of Management, Fudan University, Shanghai, China
	<b>Japanese</b> <i>September 2017 - April 2019</i> School of Foreign Language, Fudan University, Shanghai, China
RESEARCH	<b>Data quality assessment of Life History Mail Survey (LHMS)</b> University of Michigan
EXPERIENCE	<ul style="list-style-type: none"><li>• Developed rules to identify missing items in LHMS data based on questionnaire design and constructed indicators to measure the extent of missingness.</li><li>• Described missing patterns and their variation across survey waves, different sections of the questionnaire, and respondent groups.</li><li>• Applied nonparametric statistical methods to investigate the correlation between item missingness and respondent-specific covariates.</li><li>• Conducted multivariate analysis on item missingness and specified covariates by implementing beta regression with stability selection method.</li><li>• Examined the consistency between LHMS data and other data products of Health and Retirement Study</li></ul>
	<b>Sequence analysis on residential movement based on data from LHMS</b> University of Michigan
	<ul style="list-style-type: none"><li>• Coded residential movement grid data into sequences.</li><li>• Conducted sequence analysis on residential movement data and performed clustering algorithm to summarize movement types.</li><li>• Summarized and evaluated missing data imputation methods applicable to sequence data.</li></ul>
	<b>Demographics of Weibo users in China</b> Max Planck Institute for Demographic Research
	<ul style="list-style-type: none"><li>• Carried out preparatory research on social media usage in China and algorithms applied by Weibo Advertising Platform.</li><li>• Programmed a web crawler in Python to collect and organize user coverage estimates from Weibo Advertising Platform. Collected and cleaned 2020 census data and the latest available socioeconomic data.</li><li>• Performed exploratory analysis on Weibo's penetration and its user composition with a focus on visualization.</li><li>• Analyzed outliers and the correlation pattern between Weibo demographics and socioeconomic variables.</li><li>• Adopted compositional data analytic techniques to summarize demographic characteristics of Weibo users.</li></ul>

- Conducted spatial analysis on geographical distribution of penetration rates and sex ratios.

**PUBLICATION** Qian, W., Hexel, O., Zagheni, E., Kashyap, R., & Weber, I. (2023). Demographic inequalities in digital spaces in China: the case of Weibo *Workshop Proceedings of the Seventeenth International AAAI Conference on Web and Social Media (ICWSM-23)*. AAAI Press. <http://doi.org/10.36190/2023.01>.

**POSTER** The Demographic Profile of Weibo Users *April 2023*

**PRESENTATION** PAA Annual Meeting New Orleans, LA, US

The Demographics of Weibo Users in China *June 2022*

European Population Conference Groningen, NL

**SKILL & LANGUAGE** **Technology skills:** R, Python, LaTeX, Markdown, Microsoft Office, SQL, Java, MATLAB, SAS, SPSS

**Languages:** Mandarin (Native), English (Proficient), Japanese (Elementary)