

Wenqing Qian

EDUCATION	Survey and Data Science (Data Science Concentration), Master of Science	<i>August 2022 - Exp. April 2024</i>
	Institute for Social Research, University of Michigan, Ann Arbor	
	Statistics, Bachelor of Science	<i>April 2019 - June 2022</i>
	School of Management, Fudan University, Shanghai	
RESEARCH EXPERIENCE	Japanese	<i>September 2017 - April 2019</i>
	School of Foreign Language, Fudan University, Shanghai	
	Missing pattern of residential data in Life History Mail Survey	<i>January 2023 - Present</i>
	University of Michigan	
	<ul style="list-style-type: none">• Developed rules to recognize patterns of missing data in Residential History section of Life History Mail Survey based on the applicability and missingness of each question.• Conducted exploratory analysis on missing patterns and their variation across different demographic groups.• Applied nonparametric testing methods to check the heterogeneity of item missing rates across demographic groups.• Constructed a series of machine learning models to predict item missing rate using demographic characteristics.	
	Sequence analysis on residential movement based on data from Life History Mail Survey	
	University of Michigan	<i>September 2022 - January 2023</i>
	<ul style="list-style-type: none">• Code residential movement grid data into sequences.• Conducted sequence analysis on residential movement data and performed clustering algorithm to summarize movement types.• Summarized and evaluated missing data imputation methods applicable to sequence data.	
	Demographics of Weibo users in China and their relationship with socioeconomic indicators	
	Max Planck Institute for Demographic Research	<i>March 2021 - Present</i>
	<ul style="list-style-type: none">• Conducted preparatory research on social media usage in China with a focus on Sina Weibo and algorithms applied by Weibo Advertising Platform.• Wrote a web crawler in Python to collect and organize digital trace data provided by Weibo Advertising Platform. Collected and cleaned first-hand results of 2020 census and the latest available socioeconomic data about China.• Conducted exploratory analysis on Weibo's penetration and the composition of Weibo users in terms of sex, age, and their intersection.• Applied statistical methods to analyze outliers and correlation pattern between Weibo demographics and socioeconomic variables.	

- Adopted compositional data analytic techniques to summarize demographic characteristics of Weibo users.
- Conducted spatial analysis on geographical distribution of Weibo penetration rates and sex ratios.

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

PRESENTATION *Wenqing Qian, Ole Hexel, Emilio Zagheni, Ridhi Kashyap, Ingmar Weber*
PAA Annual Meeting New Orleans, LA, US

The Demographics of Weibo Users in China *June 2022*

Wenqing Qian, Ole Hexel, Emilio Zagheni, Ridhi Kashyap, Ingmar Weber
European Population Conference Online

TECHNOLOGY High Proficiency: R, Python, LaTeX, Markdown, Microsoft Office

SKILLS Others: SQL, Java, MATLAB, SAS, SPSS

LANGUAGES Mandarin (Native)
English (Proficient)
Japanese (Elementary)