

Curriculum Vitae

Xingyun Wu

Ph.D. Candidate, Sociology, Krieger School of Arts and Sciences, Johns Hopkins University

Areas of Specialization:

Social Inequality, Work and Family, Social Demography, Population Health,
Quantitative and Computational Methodology

Contact: xywu@jhu.edu

Personal website (up-to-date CV, research, and more): <https://xywu-soc.github.io/xywu/>

Education

Johns Hopkins University	2018—2025 (expected)
Ph.D., Sociology	Expected Summer 2025
Ph.D. Candidate, Sociology	2022
M.A., Sociology	2021
University of Chicago	2016—2018
M.A., Computational Social Science	2018
Hong Kong University of Science and Technology	2013-2014
M.Sc., Global China Studies	2014
Sun Yat-sen University	2010-2016
M.A., Sociology	2016
B.A., Sociology	2014

Publication

Huang, Wenxuan, Lingxin Hao, **Xingyun Wu**, Xiao Yu, Erjia Cui, and Andrew Leroux. 2023. "Gender Difference in 'Second-Shift' Physical Activity: New Insights from Analyzing Accelerometry Data in a Nationally Representative Sample." *SSM - Population Health* 24 (December):101536.
<https://doi.org/10.1016/j.ssmph.2023.101536>.

Liang, Yucheng and **Xingyun Wu**. 2016. "Educational Segregation and Aspiration with Household Registration System: Analysis using CEPS 2014." *Journal of Social Development*.

Manuscript Under Review or In Progress

Wu, Xingyun. "Spillover of Structural Constraints: Gender Structure in the Work, Family, and Person Spheres." [Completed manuscript, dissertation paper]

Wu, Xingyun. "The Division of Household Labor: Couple Analysis on Observed-Synthetic Data with Machine Learning." [Completed manuscript, dissertation paper]

Wu, Xingyun. "Work, Family, and Personal Sphere as an Integrated System: Structural Constraints on Activity-Time Allocation Across Spheres." [Dissertation paper in progress]

Arkande, Morayo, Kathryn Van Eck, **Xingyun Wu**, Eliana M. Perrin, Lingxin Hao, Pamela Matson, Elizabeth Ozer, and Arik V. Marcell. “Well-Visit Attendance from Mid-Adolescence to Young Adulthood: Who Remains Engaged?” [Under review]

Marcell, Arik V., **Xingyun Wu**, Morayo Arkande, Pam Matson, Elizabeth Ozer, and Kathryn Van Eck. “Substance-Specific Preventive Care Receipt by Substance Use Behaviors from Mid-Adolescence to Young Adulthood.” [Under review]

Van Eck, Kathryn, Morayo Akande, **Xingyun Wu**, Eliana M. Perrin, Lingxin Hao, Pamela Matson, Elizabeth Ozer, Arik V. Marcell. “Associations of Well-Visit Attendance Patterns from Mid-Adolescence to Young Adulthood with Substance Use Engagement.” [Manuscript being finalized for submission to journal]

Working Paper

Hao, Lingxin, **Xingyun Wu**, and Wenxuan Huang. “Place Resilience: The Capacity of Retaining Human and Financial Capital in the Face of Climate Change.”

Hao, Lingxin, **Xingyun Wu**, and Wenxuan Huang. “Climate Risks, County Dyads, and Migration Network Structure in the United States 2011-2020.”

Van Eck, Kathryn, **Xingyun Wu**, Morayo Akande, Eliana M. Perrin, Pamela Matson, Elizabeth Ozer, and Arik V. Marcell. “Latent Class Models for Health Promotion and Risk Behaviors Differ from Mid-Adolescence to Young Adulthood Across Health Needs, Well-Visits, and Race/Ethnicity.”

Zheng, Jiayu, Lingxin Hao, Kelun Lu, Ashi Garg, Mike Reese, Melo-Jean Yap, I-Jeng Wang, **Xingyun Wu**, Wenrui Huang, Jenna Hoffman, Ariane Kelly, My Le, Ryan Zhang, Yanyu Lin, Muhammad Faayez and Anqi Liu. “How Students Learn with AI: A Field Experiment in College STEM Gateway Classes.”

White, Alexandre, **Xingyun Wu**, and Lingxin Hao. “The Strength of Interdisciplinary Ties: The Emergence of HIV/AIDS Field from Scientific Co-Citation Networks.”

Wu, Xingyun. “Latent Structure of Occupational Mobility: A Network Approach.”

Honors and Awards

2024	Hopkins Population Center Student Summer Fellowship, Johns Hopkins University (\$5,000)
2024	Population Association of America Annual Meeting Poster Winner
2020	Levin Fellowship, for participation in ICPSR summer program, Johns Hopkins University
2017	Two-thirds tuition grant, M.A. in Computational Social Science program, University of Chicago
2016	One-half tuition grant, M.A. in Computational Social Science program, University of Chicago
2014	Outstanding Undergraduate Thesis, Sun Yat-sen University

Computational Methods and Skills

Methods	Machine learning	Supervised, semi-supervised, and unsupervised machine learning; feature selection; cross-validation. Rich experience in: <ul style="list-style-type: none">• Statistical learning with linear models, tree-based models, and support vector machines.• Deep learning with neural networks and transformers.
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	Network analysis	Community detection, latent space modeling, ERGM, multi-dimensional network analysis, and visualization.
	Textual data analysis	Word embedding, semantic analysis, topic modeling, natural language processing, and textual data processing.
	Statistical modeling	Systems of equations models, multi-level/hierarchical linear models, panel data analysis, categorical data analysis, linear models, multiple imputations, and latent class analysis.
	Sequence analysis	Clustering, supervised and semi-supervised sequence classification, and visualization.
	Spatial data analysis	Spatial regression analysis, network analysis, and visualization.
Skills	Python	Programming, statistical modeling, machine learning, spatial data analysis, visualization, data processing, and data collection.
	R	Programming, statistical modeling, machine learning, spatial data analysis, visualization, data processing, and data collection.
	Stata	Statistical modeling, data processing, and visualization.
	SQL	Relational database management and data query.
	LaTeX	Manuscript formatting and bibliography management.
	Java	Programming.
	GeoDa	Spatial data analysis.
	Gephi	Graph visualization.

Conference

2025

American Sociological Association Annual Meeting

Wu, Xingyun. “Couple’s Household Labor: New Insights with Observed-Synthetic Data Using Supervised Machine Learning and Actor-Partner Interdependence Model.”

Population Association of America Annual Meeting

Wu, Xingyun. “The Division of Household Labor: Couple Analysis on Observed-Synthetic Data.”

Society for Adolescent Health and Medicine Annual Meeting

Marcell, Arik V., Morayo Akande, **Xingyun Wu**, Eliana M. Perrin, Lingxin Hao, Pamela Matson, Kathryn Van Eck, and Elizabeth Ozer. “Well-visit attendance from mid-adolescence to young adulthood: Who remains engaged?”

Van Eck, Kathryn, Morayo Akande, **Xingyun Wu**, Eliana M. Perrin, Lingxin Hao, Pamela Matson, Elizabeth Ozer, and Arik V. Marcell. “Associations of well-visit attendance patterns from mid-adolescence to young adulthood with substance use engagement.”

8th AAAI/ACM Conference on AI, Ethics, and Society (submission under review)

Zheng, Jiayu, Lingxin Hao, Kelun Lu, Ashi Garg, Mike Reese, Melo-Jean Yap, I-Jeng Wang, **Xingyun Wu**, Wenrui Huang, Jenna Hoffman, Ariane Kelly, My Le, Ryan Zhang,

Yanyu Lin, Muhammad Faayez and Anqi Liu. "Do students rely on AI? Analysis of student-ChatGPT conversations from a field study."

2024

American Sociological Association Annual Meeting

Wu, Xingyun, Lingxin Hao, Wenxuan Huang. "Place Resilience: The Capacity of Retaining Human and Financial Capital in the Face of Climate Change."

Wu, Xingyun. "Spillover of Structural Constraints: Gender Structure in the Work, Family, and Person Spheres?"

Population Association of America Annual Meeting

Wu, Xingyun. "Structural Influence of Work Contexts on Division of Unpaid Domestic Labor." *PAA Poster Winner*.

Wu, Xingyun. "Gendered Organization of Everyday Life: How Does Work Time Matter?"

10th International Conference on Computational Social Science

Hao, Lingxin, **Xingyun Wu**, Wenxuan Huang. "Climate Risks, County Dyads, and Migration Network Structure in the United States 2011-2020."

Hao, Lingxin, Anqi Liu, Kelun Lu, Ashi Garg, Mike Reese, I-Jeng Wang, **Xingyun Wu**, Wenrui Huang, Jiayu Zheng, Melo Yap, Jenna Hoffman, and Ariane Kelly. "Exploring College Student-ChatGPT Interaction Patterns: Natural Language Processing of Conversational Data in a Randomized Experiment."

Society for Adolescent Health and Medicine Annual Meeting

Van Eck, Kathryn, **Xingyun Wu**, Morayo Arkande, Eliana M. Perrin, Pamela Matson, Elizabeth Ozer, Arik V. Marcell. "Latent Class Models for Health Promotion and Risk Behaviors Differ from Mid-Adolescence to Young Adulthood Across Health Needs, Well-Visits, and Race/Ethnicity."

Marcell, Arik V., **Xingyun Wu**, Charles R. Robinson-Snead, Morayo Arkande, Pamela Matson, Elizabeth Ozer, Kathryn Van Eck. "Low Levels of Substance Use Preventive Care at Well-Visits Observed from Mid-Adolescence to Young Adulthood that Differed by Substance Use Status."

2023

American Sociological Association Annual Meeting

Wu, Xingyun. "Gendered Arrangements of Personal Sphere: Social Constraints from Work and Family."

Population Association of America Annual Meeting

Wu, Xingyun. "Gender and Class-Based Constraints on Personal Activities and Mental Well-Being."

Wenxuan Huang, Lingxin Hao, **Xingyun Wu**, Xiao Yu, and Erjia Cui. "Gender Difference in Objectively Measured Physical Activity in the 'Second Shift'."

2022

Population Association of America Annual Meeting

Wu, Xingyun, Wenxuan Huang, and Lingxin Hao. "Social Contact in COVID-19 Pandemic: What Could We Learn from Survey Data on Activities?"

2021

American Sociological Association Annual Meeting

Wu, Xingyun. "Latent Structure of Occupational Mobility: A Network Approach."

2020 **Population Association of America Annual Meeting** (cancelled due to COVID-19)
 White, Alexandre, **Xingyun Wu**, and Lingxin Hao. “Latent Communities behind the
 Emergence of the HIV/AIDS Field: A Network Modeling Approach.”

Work Experience

Research	Research assistant 2021—2022, 2024 2023—present 2018—2020, 2023—2024 Research affiliate 2017—2018	Hopkins Population Center, Johns Hopkins University. PI: Arik V. Marcell, Johns Hopkins University. PI: Lingxin Hao, Johns Hopkins University. PI: Terry Clark, University of Chicago.
Teaching	Teaching assistant 2020 2020 Instructor 2020—2021 2017	Introduction to Social Statistics, Johns Hopkins University. Research Methods for the Social Sciences, Johns Hopkins University. Chinese Language Corner, Johns Hopkins University. Computational Social Sciences Summer Program, Sun Yat-sen University
Survey	Survey supervisor 2014—2016 2014 2011	Survey on Foreigners in Guangzhou, Sun Yat-sen University. China Longitudinal Aging Social Survey (CLASS), Renmin University. China Labor-force Dynamics Survey (CLDS), Sun Yat-sen University.