

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, teaching): <https://xywu-soc.github.io/xywu/>

Education

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|---|-----------------------------|
| 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." [Completed manuscript, dissertation paper]

Wu, Xingyun. "Work, Family, and Personal Sphere as a 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

Lingxin Hao, **Wu, Xingyun**, 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**, 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

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| 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

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| 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

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| 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.” |
| | 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.” |
| 2024 | American Sociological Association Annual Meeting | |

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

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