Deji Suolang dsuolang@umich.edu

426 Thompson St, Rm 4132 Ann Arbor, MI 48104

Education

| 2021-2026* | University of Michigan, Ann Arbor, MI |
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| | Ph.D., Survey and Data Science |
| | Advisor: Dr. Brady T. West |
| | Thesis: Combining Multiple Data Sources through an Imputation-Based |
| | Approach: Leveraging Wearable Sensor Data to Strengthen Survey Self-Reports |
| 2018-2020 | University of Michigan, Ann Arbor, MI |
| | M.S., Survey and Data Science |
| 2017 | Utrecht University, Utrecht, the Netherlands |
| | Exchange program, Social and Behavioral Sciences |
| 2014-2018 | Nanjing University, Nanjing, China |
| | B.A., Sociology (with Distinction) |

Professional Experience

| 2021–Present | University of Michigan, Ann Arbor, MI Graduate Student Research Assistant Survey Research Center, Institute for Social Research |
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| 2024 | American Institutes for Research, Arlington, VA Doctoral Researcher Intern NAEP Psychometric and Statistical Methods |
| 2020–2021 | Johns Hopkins Medicine, Baltimore, MD Survey Statistican (Research Assistantship) Department of Neurology |
| 2018–2020 | University of Michigan , Ann Arbor, MI <i>Research Associate</i> Survey Research Center, Institute for Social Research |

^{*}Expected.

Publications

In Preparation

- 1. **Suolang, D.**, Yang, J., Miller, L., Rodhouse, J. R., Page, E. T., Si, Y., & West, B. T. (2025). Weighting Adjustment and Multiple Imputation for Addressing Nonresponse in a Multi-Day Diary Survey. *Journal of Survey Statistics and Methodology (In Revision)*.
- 2. **Suolang, D.**, & West, B. T. (2025). Leveraging Wearable Sensor Data to Enhance Survey Self-Reports: A Mass Imputation Approach. *Journal of Survey Statistics and Methodology (Under Review)*.
- 3. **Suolang, D.**, & West, B. T. (TBD). Assessing the Generalizability of Imputation-Based Integration of Wearable Sensor Data and Survey Self-Reports: Evidence from a Simulation Study. *Journal TBD*.

Peer-Reviewed Articles

- 1. Wagner, J., West, B. T., Kim, B., **Suolang, D.**, Engstrom, C., & Sinibaldi, J. (2025). Using a Stopping Rule to Optimize Cost-Quality Tradeoffs in a Large, Mixed-Mode Survey: A Simulation Study. *Journal of Official Statistics*, 41(1), 329-364.
- 2. Gupta, S., Chen, B. J., **Suolang, D.**, Cooper, R., Gottesman, R., & Faigle, R. (2023). Advance Directives Among Community-Dwelling Stroke Survivors (P6-5.016). *PLOS ONE*, 18(10).
- 3. Chen, B. J., **Suolang, D.**, Frost, N., & Faigle, R. (2022). Practice Patterns and Attitudes Among Speech Language Pathologists Treating Stroke Patients with Dysphagia: A Nationwide Survey. *Dysphagia*, 37(6).
- 4. **Suolang, D.**, Chen, B. J., & Faigle, R. (2022). Temporal Trends in Racial and Ethnic Disparities in Palliative Care Use After Intracerebral Hemorrhage in the United States. *Stroke*, 53(3).
- 5. **Suolang, D.**, Chen, B. J., Wang, N. Y., Gottesman, R. F., & Faigle, R. (2021a). Temporal Trends in Stroke Thrombolysis in the U.S. by Race and Ethnicity, 2009–2018. *JAMA*, 326(17), 1741–1743.
- 6. **Suolang, D.**, Chen, B. J., Wang, N. Y., Gottesman, R. F., & Faigle, R. (2021b). Geographic and Regional Variability in Racial and Ethnic Disparities in Stroke Thrombolysis in the United States. *Stroke*, 52(12).
- 7. He, G., Chen, Y., Chen, B., Wang, H., Shen, L., Liu, L., **Suolang, D.**, ..., & Min, Z. (2018). Using the Baidu search index to predict the incidence of HIV/AIDS in China. *Scientific Reports*, 8(1).

Conference Presentations

- 1. **Suolang, D.**, & West, B. T., Assessing the Generalizability of Imputation-Based Integration of Wearable Sensor Data and Survey Self-Reports: A Simulation Study (July 2025). *ESRA*, Utrecht, the Netherlands.
- 2. **Suolang, D.**, & West, B. T., Leveraging Wearable Sensor Data to Enhance Survey Self-Reports: A Mass Imputation Approach (May 2025). *AAPOR*, St. Louis, MO.
- 3. **Suolang, D.**, Bailey, P., Rutkowski, L., Handling Missing Contextual Data in Large-Scale Assessments: A Multiple Imputation Strategy (April 2025). *NCME*, Denver, CO.
- 4. **Suolang, D.**, Yang, J., Miller, L., Rodhouse, J. R., Page, E. T., Si, Y., & West, B. T., Weighting Adjustment and Multiple Imputation for Addressing Nonresponse in a Multi-Day Diary Survey (May 2024). *AAPOR*, Atlanta, GA.
- 5. Wagner, J., West, B. T., Kim, B., **Suolang, D.**, Engstrom, C., & Sinibaldi, J., How Different Modeling Choices Impact the Performance of Stopping Rules in a Longitudinal Study (May 2023). *AAPOR*, Philadelphia, PA.
- 6. **Suolang, D.**, Effects of Front-Loaded and Escalating Incentives on Response Rates and Response Quality in Election Surveys (May 2021). *AAPOR*, Los Angeles, CA (remote).

- 7. **Suolang, D.**, West, B. T., Wagner, J., Almirall, D., Toward the Optimization of Responsive and Adaptive Survey Design (February 2020). *MSSISS*, Ann Arbor, MI.
- 8. **Suolang, D.**, Ketenci, K., Predicting Presidential Election Trends: A Public Opinion Survey Using Web-Sourced Data (November 2020). *BigSurv20*, Utrecht, the Netherlands (remote).
- 9. Hu, M., He, W., **Suolang, D.**, Zhang, S., West, B. T., Kirlin, J. A., & Zhang, X., Response Patterns in a Multi-Day Diary Survey: Implications for Adaptive Survey Design (May 2019). *AAPOR*, Toronto, Canada.

Projects

2022-Present Combining Multiple Data Sources for Better Estimation: Leveraging Wearable Sensor Data to Strengthen Self-Reports in Health Surveys (Dissertation project)

Developed a mass-imputation method to integrate wearable sensor and survey self-report data, improving measurement accuracy and strengthening inference for population health research. Addressed key methodological challenges including non-probability samples, selection bias, and complex survey design.

2023-Present Survey Modernization and Statistical Methods for FoodAPS (USDA-funded)

Applied weighting and imputation methods to reduce nonresponse and measurement error in a national food acquisition survey, providing policymakers with more reliable evidence for nutrition-related funding decisions and informing improvements in future survey design.

2024 Advancing Missing Data Methods for NCES Large-Scale Assessments (NCES-funded)

Designed tailored imputation strategies to address missing survey and latent outcome data in large-scale assessments, enhancing data quality and supporting evidence-based

evaluation of educational and health programs.

2021-2022 Modernization and Adaptive Design in Longitudinal Surveys (NCSES-funded)

Simulated adaptive interventions to optimize cost-quality tradeoffs in longitudinal surveys, producing recommendations to reduce attrition, minimize bias, and enhance

the reliability of program evaluation and workforce data.

2020–2021 Racial Inequities in Healthcare Attitudes and Utilization in the U.S. (NIH-funded)

Analyzed surveys, administrative records, medical claims, and qualitative data to identify disparities in healthcare utilization, patient experiences, and outcomes, generating evidence to guide improvements in healthcare delivery and inform policy decisions.

Consulting

2025 Kelsey Museum of Archaeology

Designed and executed a visitor experience survey to assess perceptions and satisfaction. Provided insights that informed leadership decisions on exhibit planning and enhanced strategies for visitor learning and engagement.

2020 Starboard Corp. (Supply Chain SaaS in Michigan)

Conducted employee and client survey research to evaluate workplace experience and software usability, identifying behavioral patterns and pain points that guided leadership decisions on product development and organizational adoption.

2020 Python–NumPy Steering Council

Designed and launched the first survey of NumPy contributors and users, generating insights on behavior, engagement, and experience that guided decisions on support resources in the open-source ecosystem.

Awards & Honors

| 2025 | Winner, AAPOR Seymour Sudman Student Paper Award |
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| 2025 | Best Presentation Award, Michigan Student Symposium for Interdisciplinary Statistical |
| | Sciences |
| 2025 | Rackham Travel Award, ESRA Annual Conference |
| 2024 | Daniel Katz Dissertation Fellowship |
| 2024 | Note: This \$25,000 research grant was part of the ISR Next Generation Awards. |
| 2024 | Rackham Travel Award, JSM Annual Conference |
| 2024 | MPSDS Travel Award, AAPOR Annual Conference |
| 2024 | Rackham Travel Award, AAPOR Annual Conference |
| 2023 | MAPOR Student Support Award |
| 2023 | Rackham Travel Award, ESRA Annual Conference |
| 2020 | Best Methods Award, Poster Competition, BigSurv20 Conference |
| 2020 | Best Poster Award, Michigan Student Symposium for Interdisciplinary Statistical Sciences |
| 2019 | MPSM Travel Award, APA Annual Conference |
| 2016 | Honorable Mention, Nanjing University Student of the Year |

Teaching Experience

Graduate Student Instructor

| 2022 | SURVMETH 621 Data Collection I |
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| 2022 | SURVMETH 632 Cognition, Communication, and Survey Measurement |
| 2023 | SURVMETH 622 Data Collection II |
| 2023 | SURVMETH 625 Applied Sampling |

Short Courses and Tutorials

2022 Guest Lecturer, Tutorial on Qualtrics Programming (MPSDS)

Professional Memberships

| National Council on Measurement in Education |
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| American Statistical Association |
| European Survey Research Association |
| Midwest Association for Public Opinion Research |
| American Association for Public Opinion Research |
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Committees

2025 Project Lead, STATCOM (Statistics in the Community) at the University of Michigan

2022-2023 Orgnizing Committee, Responsible for the 17th Annual Michigan Student Symposium in Interdisciplinary Statistical Sciences (MSSISS, March 2023)

Service

| 2025 | Reviewer for Discover Applied Sciences |
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| 2024 | Moderator, AAPOR Annual Conference, Innovations in Statistical Methods for Quality |
| 2024 | Improvement Reviewer for abstract submissions, AAPOR Annual Conference |
| 2024 | Moderator, AAPOR Annual Conference, New Applications of Multiple Imputation and |
| | Model-Based Methods to Survey Research |
| 2022 | Moderator, AAPOR Annual Conference, Using Social Media and Big Data to Predict |
| | COVID Beliefs |
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