JINGHAO SUN

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PROFESSIONAL EXPERIENCE

Postdoctoral Researcher *July 2023 - present*
Center for Causal Inference, University of Pennsylvania, USA

EDUCATION

Yale University, USA *August 2017 - June 2023*
Ph.D. in Biostatistics, Yale School of Public Health
Advisor: Forrest W. Crawford

Tsinghua University, China *August 2012 - July 2017*
B.S. in Biological Sciences

University of Zurich, Switzerland *September 2014 - January 2015*
Exchange Program in Bioinformatics

RESEARCH INTERESTS

Methodology

· Causal identification and inference for complex data.
· Semi/Nonparametric inference, Partial identification, Stochastic models.

Applications

· Public health, Medicine, Policy, Biology, Digital platforms.

HONORS AND AWARDS

· Best Student Paper Award, Lifetime Data Science Conference *2023*
· Tyroler Student Prize Paper Award Finalist (Top 5), Society for Epidemiologic Research *2023*
· Travel Scholarship, Society for Epidemiologic Research *2023*
· World Scholars in Biomedical Sciences, Yale University *2017, 2018*
· Exchange Scholarship for Excellent Undergraduates, Tsinghua University *2014*
· Merit-Based Scholarship, Tsinghua University *2013*

PAPERS

Jinghao Sun, Forrest W. Crawford. (2023) The role of discretization scales in causal inference with continuous-time treatments. *arXiv:2306.08840*. (Working paper)

Jinghao Sun, Forrest W. Crawford. (2022) Causal identification for continuous-time stochastic processes. *arXiv:2211.15934*. (Submitted)

Jinghao Sun, Luk Van Baelen, Els Plettinckx, Forrest W. Crawford. (2022) Dependence-robust confidence intervals for capture-recapture surveys. *Journal of Survey Statistics and Methodology*, DOI: 10.1093/jssam/smac031.

Wenran Li, Meng Wang, **Jinghao Sun**, Yong Wang, Rui Jiang (2017). Gene co-opening network deciphers gene functional relationships. *Molecular BioSystems*, 13(11), 2428-2439.

Jinghao Sun (2017). Neural Architecture for Biomedical Named Entity Recognition. *Undergraduate Thesis*.

SOFTWARE

`crc.partialid` (author, maintainer): R package on partial identification analysis for capture-recapture experiments. [on github]

PRESENTATIONS

New England Statistics Symposium (2023, Boston, MA), **Invited Talk**. Causal identification for continuous-time stochastic processes.

Lifetime Data Science Conference (2023, Rayleigh, NC), **Invited Talk**. Causal identification for continuous-time stochastic processes.

Eastern North American Regional meeting of the International Biometric Society (2023, Nashville, TN), **Invited Talk**. Causal identification for general continuous-time stochastic processes.

Joint Statistical Meetings (2022, Washington, DC), Contributed Talk. Identification for treatment effects of general continuous-time stochastic processes.

American Causal Inference Conference (2022, Berkeley, CA), Contributed Poster. The role of discretization scales in causal inference with longitudinal treatments.

Yale School of Publich Health Research in Progress Seminar (2022, Yale, CT), **Invited Talk**. Conceptual and analytical issues of discretizations of the timeline in causal inference.

New England Statistics Symposium (2021, Providence, RI), **Invited Talk**. Partial identification and dependence-robust confidence intervals for capture-recapture surveys.

Joint Statistical Meetings (2021, Virtual), Speed Presentation. Discretization bias in causal inference with trajectory data.

Joint Statistical Meetings (2020, Virtual), **Invited Poster**. Partial identification in capture-recapture experiments.

PROFESSIONAL ACTIVITIES

Journal Reviewer: SIAM Journal on Mathematics of Data Science (2020), Austrian Journal of Statistics (2023), Journal of Asthma (2024).

Conference Reviewer: APHA Annual Meeting (2022, 2023), ACIC (2023).

Societies: American Statistical Association, Society for Causal Inference, International Biometric Society (Eastern North American Region), Society for Epidemiologic Research, New England Statistical Society.

TEACHING EXPERIENCE

2021-Fall. Teaching Fellow. Stochastic Models and Inference. (Graduate level) Instructor: Prof. Forrest Crawford.

2020-Fall. Teaching Fellow. Stochastic Models and Inference. (Graduate level) Instructor: Prof. Forrest Crawford.

2019-Fall. Teaching Fellow. Advanced Regression Models. (Graduate level) Instructor: Prof. Yize Zhao.