Lin Gui

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EDUCATION

- Ph. D. in Statistics, The University of Chicago, Chicago, USA 2020- Present
- M.S. in Statistics, The University of Chicago, Chicago, USA 2018-2020
- B.S. in Statistics, University of Science and Technology of China, Hefei, China 2014- 2018

RESEARCH INTERESTS

Selective Inference, Causal Inference, and Machine Learning.

PUBLICATIONS

- **Detecting Multiple Replicating Signals using Adaptive Filtering Procedures**
  Jingshu Wang, Lin Gui, Weijie J. Su, Chiara Sabatti, Art B. Owen
  The Annals of Statistics (accepted)
- **Mitigating Overlap Violations in Causal Inference with Text Data**
  Lin Gui, Victor Veitch
  NeurIPS 2021 Workshops

RESEARCH

- **Causal Estimation for Text Data with Apparent Overlap Violations**
  - Researched on estimating causal effect of some attribute of a text document on the outcome from observational data.
  - Developed a method to recognize a text representation satisfying both unconfoundedness and mitigate the overlap issue in causal inference problems.
  - Proposed a causal estimator with low bias and valid uncertainty quantification.
- **A General Transformation Based Method For Global Test With Correlated Hypotheses**
  - Conducted empirical and theoretical studies and provided insights into the state-of-the-art Cauchy combination test and its generalization method for the global test with correlated hypotheses.
  - Generalized the generalized global testing method to a multiple testing procedure that can control the family-wise error rate (FWER) and proposed a shortcut for this closed testing procedure.
  - Applied the method to genetic data to solve real-world problems.

TALKS

- **2021 Joint Statistical Meetings, Speaker** Aug. 2021
  - Detecting Multiple Replicating Signals Using Adaptive Filtering Procedures

CODING SKILLS

R, Python, Matlab; Parallel computing on computing clusters; Pytorch

HONORS & AWARDS

- Nominee, The 37th. Guo Moruo Scholarship (The highest honor at USTC) 2017
- Winner, Outstanding Student Scholarship, USTC 2016-2017
- Winner, China National Scholarship, USTC 2015