

# Lin Gui

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## EDUCATION

- The University of Chicago, Chicago, USA Oct. 2020- Present  
Ph. D. in Statistics
- The University of Chicago, Chicago, USA Oct. 2018- Mar. 2020  
M.S. in Statistics
- University of Science and Technology of China (USTC), Hefei, China Sep. 2014- Jul. 2018  
B.S. in Statistics

## 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)

## RESEARCH

- **Causal Inference with Text Data**
  - Researched on discovering the causal relationship between the treatment and the outcome by detecting unobserved confounders from text data.
  - Developed a method to recognize text representations satisfying unconfoundedness and mitigate the overlap issue in causal inference problems.
- **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 for the global test with correlated hypotheses.
  - Generalized the Cauchy method to a family of transformation methods, which complete the theoretical framework.
- **Feature Augmentation in High-Dimensional Classification**
  - Solved the multi-classification problem for notorious high-dimensional data based on the original FANS method.
  - Boosted the FANS with another classifier using well-chosen projections to realize both dimensional reduction and classification.

## 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