

XINTAO XIA

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EDUCATION

Iowa State University

Fall 2019 - Fall 2025

· Doctor of Philosophy, Statistics

University of Science and Technology of China

Fall 2014 - Spring 2019

· Bachelor of Science, Mathematics

· Bachelor of Natural Science, Physics

AWARDS

Hannan Graduate Student Travel Award

Institute of Mathematical Statistics 2024

Research Excellence Award

Iowa State University 2023

George W. Snedecor Award - Most Outstanding Ph.D. Candidate in Statistics

Iowa State University 2021

Department Award for Early Academic Achievement - Outstanding Performance in First-Year Courses and the MS Exam

Iowa State University 2020

Excellent Student Scholarship University of Science and Technology of China 2014 - 2019

Elite Class Award

University of Science and Technology of China 2014 - 2019

RESEARCH INTEREST

Statistical Inference in Differential privacy; Causal inference; Causal discovery; High-dimensional statistics; False discovery rate control;

PAPERS

- 1 **Xintao Xia**, Linjun Zhang and Zhanrui Cai. *Statistical Inference for Differentially Private Stochastic Gradient Descent*, arXiv: 2507.20560. (Major revision at Journal of the American Statistical Association)
- 2 **Xintao Xia**, Linjun Zhang and Zhanrui Cai. Differentially Private Sliced Inverse Regression: Minimax Optimality and Algorithm, arXiv: 2401.08150. (Accepted by Journal of the American Statistical Association)
- 3 **Xintao Xia**, Xiaofei Zhang and Wayne Fuller. Estimation for Nearest Neighbor Imputed Survey Data. *Journal of Survey Statistics and Methodology*, smae048, 2025.
- 4 **Xintao Xia** and Zhanrui Cai. Adaptive False Discovery Rate Control with Privacy Guarantee. *Journal of Machine Learning Research*, 24:1–35, 2023.
- 5 Zhanrui Cai, Sai Li, **Xintao Xia*** and Linjun Zhang. *Private Estimation and Inference in High-Dimensional Regression with FDR Control*, arXiv: 2310.16260. (R&R at Journal of Machine Learning Research)

*In alphabetical order.

WORKING PAPERS

- 6 Yumou Qiu, Jing Tao and **Xintao Xia***. *Inference of Heterogeneous Quantile Treatment Effects Using Observational Data with High-Dimensional Covariates.*
- 7 **Xintao Xia** and Yumou Qiu. *Multiply Robust Inference of Treatment Effects under High-dimensional Clustered Data.*
- 8 **Xintao Xia**, Chen Li and Chunlin Li. *Learning a directed acyclic graph with additive heteroscedastic errors.*

INVITED TALK

- 2023 16th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2023)(*Berlin, Germany*)
- 2023 Center for Survey Statistics and Methodology (CSSM) Survey Working Group Seminar (*Ames, Iowa, USA*)

TECHNICAL AND LABORATORY SKILLS

Numerical and Data Analysis: R, Python
Programming Language: Python, C, C++
Miscellaneous: L^AT_EX, Github