

# DANIEL XIANG

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## EDUCATION

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**PhD in Statistics**, *University of Chicago* 9/2017 – 5/2023 (expected).

Advisors: Chao Gao and Peter McCullagh

**ScB in Applied Mathematics**, *Brown University* 9/2013 – 5/2017.

Academic advisor: Bjorn Sandstede

## PREPRINTS

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Xiang, D., Ignatiadis, N., & McCullagh, P. (2024+). Interpretation of local false discovery rates under the zero assumption. [working draft](#).

Tresoldi, M., Xiang, D., & McCullagh, P. (2024+). Sparse-limit approximation for  $t$ -statistics [working draft](#).

Xiang, D., Soloff, J. A., & Fithian, W. (2024+). A frequentist local false discovery rate. [working draft](#).

Soloff, J. A., Xiang, D., & Fithian, W. (2024+). The edge of discovery: Controlling the local false discovery rate at the margin. *To appear in Annals of Statistics*. [arxiv:2207.07299](#)

Xiang, D. & Gao, C. (2024+). Sharp phase transitions in high-dimensional changepoint detection.

Xiang, D. & McCullagh, P. (2020). Permanent Graphs. [arxiv:2009.10902](#)

## RESEARCH INTERESTS

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Multiple hypothesis testing, Selective inference

## AWARDS

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First place team, Citadel Datathon at UC Berkeley, Fall 2017

Magna cum laude (Brown University, Spring 2017).

Rohn Truell Prize in Applied Math (Brown University, Spring 2017).

Phi Beta Kappa, (Brown University, Spring 2016).

## TEACHING EXPERIENCE

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**UChicago** 2017 – 2022.

Statistical Models and Methods (Instructor, Spring 2022 and Fall 2022).

Statistical Methods and Applications (Instructor, Spring 2020) co-taught with Peter McCullagh.

PhD qualifying exam preparation (Coach, Summer 2022).

Statistical Theory and Methods (TA, Winter 2021), taught by Rina Barber.

Introduction to Bayesian Data Analysis (TA, Spring 2021), taught by Fei Liu.

**Brown University** 2014 – 2015.

Statistical Inference I (TA, Summer 2017), taught by Michael Snarski.

Machine Learning (TA, Spring 2017), taught by Pedro Felzenszwalb.

Ordinary Differential Equations (TA, Fall 2015), taught by Bjorn Sandstede.

## GRADUATE-LEVEL COURSEWORK

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Statistical consulting; applied statistics; theoretical statistics; probability theory; statistical learning theory; topics in selective inference; Bayesian nonparametrics; convex optimization; recent applications of probability and statistics; stochastic processes; measure theory; functional analysis

## TALKS

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1. A frequentist perspective on the local false discovery rate. *12th International Conference on Multiple Comparison Procedures*, Aug. 2022.