

# Kan Xu

The Ronald O. Perelman Center for  
Political Science and Economics  
133 South 36th Street, Suite 650  
Philadelphia, PA 19104

kanxu@upenn.edu  
(312) 560 0029  
kanxu526.github.io

## Education

**University of Pennsylvania**  
Ph.D. in Economics

Philadelphia, PA  
2018 – 2023 (Expected)

**University of Chicago**  
M.S. in Statistics

Chicago, IL  
2015 – 2017

**Tsinghua University**  
B.S. in Mathematics  
B.A. in Economics

Beijing, China  
2011 – 2015  
2013 – 2015

## Research Interests

**Data-collaborative machine learning:** multitask learning, transfer learning, federated learning  
**(Sequential) data-driven decision making:** bandit algorithms, reinforcement learning

**High-dimensional statistics:** LASSO, matrix factorization

**Others:** safety, robustness, natural language processing, healthcare operations, dynamic pricing

## Working Papers

**Learning Across Bandits in High Dimension via Robust Statistics**

(with Hamsa Bastani)

**[Job Market Paper]**

Major Revision, **Management Science**

- 3rd Place, IBM Service Science Best Student Paper Award (2022)

**Group-Sparse Matrix Factorization for Transfer Learning of Word Embeddings**

(with Xuanyi Zhao, Hamsa Bastani and Osbert Bastani)

Under Review, **Management Science**

- Preliminary version in International Conference on Machine Learning (ICML), 2021

**Robust Generalization of Quadratic Neural Networks via Function Identification**

(with Hamsa Bastani and Osbert Bastani)

**Mind the Gap: Safely Bridging Offline and Online Reinforcement Learning**

(with Wanqiao Xu, Jason Yecheng Ma, Hamsa Bastani and Osbert Bastani)

**Two-Stage Maximum Score Estimator**

(with Wayne Gao, Sheng Xu)

## Publications

**Group-Sparse Matrix Factorization for Transfer Learning of Word Embeddings**

(with Xuanyi Zhao, Hamsa Bastani and Osbert Bastani)

**International Conference on Machine Learning (ICML), 2021**

## Talks

**Learning Across Bandits in High Dimension via Robust Statistics**

INFORMS Annual Meeting

2022

Cornell Young Researchers Workshop (Poster)

2022

MSOM Conference

2022

RMP Conference	2022
NYC Operations Day	2022
<b>Group-Sparse Matrix Factorization for Transfer Learning of Word Embeddings</b>	
INFORMS Annual Meeting	2021
ICML Conference	2021
MSOM Conference	2021
RMP Conference	2021
INFORMS Annual Meeting	2020

## Teaching Experience

<b>The Wharton School, University of Pennsylvania</b>	
Teaching Assistant, OIDD 612 Business Analytics (MBA)	2021
<b>University of Pennsylvania</b>	
Teaching Assistant, ECON 705 Econometrics I (PhD)	2020

## Service

Reviewer for Management Science, Operations Research, AISTATS	
Session Chair, INFORMS Annual Meeting	2022

## Awards and Honors

3rd Place, IBM Service Science Best Student Paper Award	2022
Xingmei Zhang & Yongge Dai Fellowship	2020 – 2021

## Professional Experience

<b>Moelis &amp; Company</b>	New York, NY
Data Science Intern	Summer 2020
<b>University of Chicago, Department of Economics</b>	Chicago, IL
Research Specialist	2017 – 2018

## Skills

**Programming:** Python, R, MATLAB, SQL, Bash, Git, STATA, ArcGIS  
**Languages:** English (professional), Chinese (native)

## References

<b>Prof. Hamsa Bastani</b> (Advisor)	<b>Prof. Noah Gans</b>
Operations, Information and Decisions	Operations, Information and Decisions
The Wharton School	The Wharton School
hamsab@wharton.upenn.edu	gans@wharton.upenn.edu
(215) 573 5365	(215) 573 7673
<b>Prof. Osbert Bastani</b>	
Computer and Information Science	
University of Pennsylvania	
obastani@seas.upenn.edu	
(215) 573 2815	