Christina Lee Yu

(formerly Christina E. Lee)
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Employment

Cornell University — *Ithaca, NY*
Assistant Professor — *July 2018 - present*
School of Operations Research and Information Engineering
Graduate Field Member in Operations Research, Computer Science, Statistics, and Applied Mathematics

Amazon, Fulfillment Optimization — Virtual
Amazon Scholar — *April 2025 - present*

Microsoft Research New England — *Cambridge, MA*
Postdoctoral Researcher — *Sept 2017 - June 2018*

Education

Massachusetts Institute of Technology — *Cambridge, MA*
Ph.D. in Electrical Engineering and Computer Science — *Sept 2017*
Thesis: Latent Variable Model Estimation via Collaborative Filtering
GPA 4.9/5.0

Massachusetts Institute of Technology — *Cambridge, MA*
M.S. in Electrical Engineering and Computer Science — *May 2013*
Thesis: Computing Stationary Distribution Locally
GPA 4.9/5.0

California Institute of Technology — *Pasadena, CA*
B.S. in Computer Science — *June 2011*
GPA 4.0/4.0, Graduated with Honors - ranked 10th out of 235

Honors and Awards

SIGMETRICS Rising Stars Award	2024
NSF CAREER Award	2024
SIGMETRICS Best Student Paper Award	2023
Ralph S. Watts '72 Excellence in Teaching Award	2022
Intel Rising Stars Award	2021
JPMorgan Faculty Research Award	2021
Simons Institute Research Fellow	2021
INFORMS Dantzig Dissertation Award Honorable Mention	2018
EECS Rising Star	2016
Claude E. Shannon Research Assistantship	2016-17
NSF Graduate Research Fellowship	2013-16

Grants

National Science Foundation (NSF) CAREER: Randomized Experimentation for Systems with Time-varying Dynamics and Network Interference, $595K, July 2024 - June 2029.

Air Force Office of Scientific Research (AFOSR) Complex Networks program: "Efficiently Exploiting Structure for Causal Inference in the Presence of Network Interference", $450K, July 2023 - June 2026.

JPMorgan Faculty Research Award, "Exploiting Low Rank Structure for Provably Efficient Reinforcement Learning", $100K, August 2021 - July 2023.

Intel Rising Stars Faculty Award, $50K, awarded August 2021.

National Science Foundation (NSF) CNS Core: Resource Constrained Reinforcement Learning for Computing Systems, joint with co-PIs Siddhartha Banerjee, Christoph Studer, and Qiaomin Xie, $1,200K, July 2020 - June 2024.

National Science Foundation (NSF) CISE Research Initiation Initiative (CRII): Generalizations for Matrix and Tensor Estimation, $175K, July 2020 - June 2023.

PUBLICATION

*If entry prefaced by * then authors are ordered alphabetically; if entry prefaced by ** then student authors are placed first followed by faculty in alphabetical order.*
† *denotes a PhD student under my supervision.*

Journal Publications (13)

Chunyin (Alex) Siu, Gennady Samorodnitsky, Christina Lee Yu, Rongyi He. "The Asymptotics of the Expected Betti Numbers of Preferential Attachment Clique Complexes." *Advances of Applied Probability* (2025): 1-29.

Chunyin Siu, Gennady Samorodnitsky, Christina Lee Yu, Andrey Yao. "Detection of Small Holes by the Scale-Invariant Robust Density-Aware Distance (RDAD) Filtration." *Journal of Applied and Computational Topology* 8, no. 6 (2024): 1793-1836.

Mayleen Cortez†, Matthew Eichhorn†, and Christina Lee Yu. "Exploiting Neighborhood Interference with Low Order Interactions under Unit Randomized Design." *Journal of Causal Inference* 11, no. 1 (2023): 20220051.

**Tyler Sam†, Yudong Chen, and Christina Lee Yu. "Overcoming the Long Horizon Barrier for Sample-Efficient Reinforcement Learning with Latent Low-Rank Structure." *Proceedings of the ACM on Measurement and Analysis of Computing Systems* 7, no. 2 (2023): 1-60. Accepted to *Communications of the ACM Research Highlights*, 2024.

*Devavrat Shah and Christina Lee Yu. "Robust Max Entrywise Error Bounds for Sparse Tensor Estimation via Similarity Based Collaborative Filtering." *IEEE Transactions on Information Theory* 69, no. 5 (2023): 3121-3149.

**Sean R. Sinclair†, Siddhartha Banerjee, and Christina Lee Yu. "Adaptive Discretization for Online Reinforcement Learning." *Operations Research* 71, no. 5 (2023): 1636-1652.

**Sean R. Sinclair†, Gauri Jain, Siddhartha Banerjee, and Christina Lee Yu. "Sequential Fair Allocation: Achieving the Optimal Envy-Efficiency Tradeoff Curve."

Operations Research 5 (2023): 1689-1705.. Finalist for 2022 INFORMS Diversity, Equity, and Inclusion Student Paper Competition.

Christina Lee Yu, Edo Airoldi, Christian Borgs, and Jennifer Chayes. "Estimating Total Treatment Effect in Randomized Experiments with Unknown Network Structure." *Proceedings of the National Academy of Sciences* 119, no. 44 (2022): e2208975119.

Christina Lee Yu and Xumei Xi†. "Tensor Completion with Nearly Linear Samples Given Weak Side Information." *Proceedings of the ACM on Measurement and Analysis of Computing Systems* 6, no. 2 (2022): 1-35.

*Christian Borgs, Jennifer Chayes, Devavrat Shah, and Christina Lee Yu. "Iterative Collaborative Filtering for Sparse Matrix Estimation." *Operations Research* 70, no. 6 (2022): 3143-3175.

**Sean R. Sinclair†, Siddhartha Banerjee, and Christina Lee Yu. "Adaptive Discretization for Episodic Reinforcement Learning in Metric Spaces." *Proceedings of the ACM on Measurement and Analysis of Computing Systems* 3, no. 3 (2019): 1-44.

*Yihua Li, Devavrat Shah, Dogyoon Song, and Christina Lee Yu. "Nearest Neighbors for Matrix Estimation Interpreted as Blind Regression for Latent Variable Model." *IEEE Transactions on Information Theory* 66, no. 3 (2019): 1760-1784.

*Asuman Ozdaglar, Devavrat Shah, and Christina Lee Yu. "Asynchronous Approximation of a Single Component of the Solution to a Linear System." *IEEE Transactions on Network Science and Engineering* 7, no. 3 (2019): 975-986.

Refereed Conference Publications (22)

Mayleen Cortez-Rodriguez†, Matthew Eichhorn, and Christina Lee Yu. "Analysis of Two-Stage Rollout Designs with Clustering for Causal Inference under Network Interference." In *International Conference on Artificial Intelligence and Statistics*, pp. 3970-3978. PMLR, 2025.

*Yudong Chen, Xumei Xi†, and Christina Lee Yu. "Entry-Specific Matrix Estimation under Arbitrary Sampling Patterns through the Lens of Network Flows." In *16th Innovations in Theoretical Computer Science Conference (ITCS 2025)*, pp. 36-1. Schloss Dagstuhl–Leibniz-Zentrum für Informatik, 2025.

**Tyler Sam†, Yudong Chen, and Christina Lee Yu. "The Limits of Transfer Reinforcement Learning with Latent Low-rank Structure." *Advances in Neural Information Processing Systems* 37 (2024): 108262-108330.

*Siddhartha Banerjee, Alankrita Bhatt, and Christina Lee Yu. "The SMART Approach to Instance-Optimal Online Learning." In *The Thirty Seventh Annual Conference on Learning Theory*, pp. 426-426. PMLR, 2024.

Haiyun He, Christina Lee Yu, Ziv Goldfeld. "Hierarchical Generalization Bounds for Deep Neural Networks." In *2024 IEEE International Symposium on Information*

Theory (ISIT), pp. 2688-2693. IEEE, 2024.

Xumei Xi†, Christina Lee Yu, and Yudong Chen. "Entry-Specific Bounds for Low-Rank Matrix Completion under Highly Non-Uniform Sampling." In *2023 IEEE International Symposium on Information Theory (ISIT)*, pp. 2625-2630. IEEE, 2023.

**Tyler Sam†, Yudong Chen, and Christina Lee Yu. "Overcoming the Long Horizon Barrier for Sample-Efficient Reinforcement Learning with Latent Low-Rank Structure." *ACM SIGMETRICS Performance Evaluation Review* 50, no. 4 (2023): 41-43. Received *ACM SIGMETRICS* Best Student Paper Award.

Mayleen Cortez†, Matthew Eichhorn†, and Christina Lee Yu. "Staggered Rollout Designs Enable Causal Inference Under Interference Without Network Knowledge." *Advances in Neural Information Processing Systems* 35 (2022): 7437-7449.

Christina Lee Yu. "Nonparametric Matrix Estimation with with One-Sided Covariates." In *2022 IEEE International Symposium on Information Theory (ISIT)*, pp. 892-897. IEEE, 2022.

**Sean R. Sinclair†, Siddhartha Banerjee, and Christina Lee Yu. "Sequential Fair Allocation: Achieving the Optimal Envy-Efficiency Tradeoff Curve." *ACM SIGMETRICS Performance Evaluation Review* 50, no. 1 (2022): 95-96.

Christina Lee Yu and Xumei Xi†. "Tensor Completion with Nearly Linear Samples Given Weak Side Information." In *Abstract Proceedings of the 2022 ACM SIGMETRICS/IFIP PERFORMANCE Joint International Conference on Measurement and Modeling of Computer Systems*, pp. 73-74. 2022.

*Christopher Archer, Siddhartha Banerjee, Mayleen Cortez, Carrie Rucker, Sean R. Sinclair, Max Solberg, Qiaomin Xie, and Christina Lee Yu. "ORSuite: Benchmarking Suite for Sequential Operations Models." *ACM SIGMETRICS Performance Evaluation Review* 49, no. 2 (2022): 57-61.

**Sean R. Sinclair†, Gauri Jain, Siddhartha Banerjee, and Christina Lee Yu. "Sequential Fair Allocation of Limited Resources under Stochastic Demands." *Harvard CRCS AI for Social Good Workshop and Mechanism Design for Social Good Workshop*, 2020.

Sean R. Sinclair†, Tianyu Wang, Gauri Jain, Siddhartha Banerjee, and Christina Lee Yu. "Adaptive Discretization for Model-Based Reinforcement Learning." *Advances in Neural Information Processing Systems* 33 (2020): 3858-3871.

**Sean R. Sinclair†, Siddhartha Banerjee, and Christina Lee Yu. "Adaptive Discretization for Episodic Reinforcement Learning in Metric Spaces." In *Abstracts of the 2020 SIGMETRICS/Performance Joint International Conference on Measurement and Modeling of Computer Systems*, pp. 17-18. 2020. Poster in Neurips Workshop on the Optimization Foundations of Reinforcement Learning, 2019.

*Nirandika Wanigasekara and Christina Lee Yu. "Nonparametric Contextual Bandits in an Unknown Metric Space." *Advances in Neural Information Processing*

Systems 32 (2019): 14684-14694.

*Devavrat Shah and Christina Lee Yu. "Iterative Collaborative Filtering for Sparse Noisy Tensor Estimation." In *2019 IEEE International Symposium on Information Theory (ISIT)*, pp. 41-45. IEEE, 2019.

*Devavrat Shah and Christina Lee Yu. "Reducing Crowdsourcing to Graphon Estimation, Statistically." In *International Conference on Artificial Intelligence and Statistics*, pp. 1741-1750. PMLR, 2018.

*Christian Borgs, Jennifer Chayes, Christina E. Lee and Devavrat Shah. "Thy Friend is My Friend: Iterative Collaborative Filtering for Sparse Matrix Estimation." *Advances in Neural Information Processing Systems* 30 (2017).

*Christina E. Lee, Yihua Li, Devavrat Shah and Dogyoon Song. "Blind Regression via Nearest Neighbor under Latent Variable Models: Nonparametric Regression for Latent Variable Models via Collaborative Filtering." *Advances in Neural Information Processing Systems* 29 (2016).

*Christina E. Lee, Asuman Ozdaglar and Devavrat Shah. "Computing the Stationary Distribution Locally." *Advances in Neural Information Processing Systems* 26 (2013).

Elizabeth Bodine-Baron, Christina Lee, Anthony Chong, Babak Hassibi and Adam Wierman. "Peer effects and stability in matching markets." In *International Symposium on Algorithmic Game Theory*, pp. 117-129. Berlin, Heidelberg: Springer Berlin Heidelberg, 2011.

Preprints (7)

Vydhourie Thiyageswaran, Alex Kokot, Jennifer Brennan, Marina Meila, Christina Lee Yu, and Maryam Fazel. "Optimal Design under Interference, Homophily, and Robustness Trade-offs." *ArXiv:2601.17145*, 2026.

*Siddhartha Banerjee, Alankrita Bhatt, and Christina Lee Yu. "The SMART Approach to Instance-Optimal Online Learning." *Arxiv:2402.17720*, 2024. Major revision in *Management Science*.

*Matthew Eichhorn, Samir Khan, Johan Ugander, and Christina Lee Yu. "Low-order outcomes and clustered designs: combining design and analysis for causal inference under interference." *Arxiv:2405.07979*, 2024. Major revision in *Management Science*.

*Su Jia, Nathan Kallus, Christina Lee Yu. "Clustered Switchback Designs for Experimentation Under Spatio-temporal Interference." *Arxiv:2312.15574*, 2023. Major revision in *Journal of Causal Inference*.

*Yudong Chen, Xumei Xi†, and Christina Lee Yu. "Entry-Specific Matrix Estimation under Arbitrary Sampling Patterns through the Lens of Network Flows" *Arxiv:2409.03980*, 2024. Under submission to *Management Science*.

Anish Agarwal, Sarah Cen, Devavrat Shah, and Christina Lee Yu. "Network Synthetic Interventions: A Framework for Panel Data with Network Interference." *Arxiv:2210.11355*, 2022. Under submission to *IEEE Transactions on Information Theory*.

Zhongjun Zhang, Shipra Agrawal, Ilan Lobel, Sean R. Sinclair, and Christina Lee Yu. "Reinforcement Learning in MDPs with Information-Ordered Policies." *Arxiv:2508.03904*, 2025. Under submission to *Operations Research*.

*Siddhartha Banerjee, Sean R. Sinclair†, Milind Tambe, Lily Xu, Christina Lee Yu. "Artificial Replay: A Meta-Algorithm for Harnessing Historical Data in Bandits." *Arxiv:2210.00025*, 2022.

Xumei Xi†, Christina Lee Yu, Yudong Chen. "Matrix Estimation for Offline Evaluation in Reinforcement Learning with Low-Rank Structure." *Arxiv:2305.15621*, 2023.

Advising

Postdoctoral Researchers

Haiyun He, jointly supervised with Ziv Goldfeld, 2023-2025
First employment: assistant professor at the Hong Kong University of Science and Technology (Guangzhou)

PhD Advisees (graduated)

Sean Sinclair, jointly supervised with Siddhartha Banerjee, graduated May 2023
Thesis title: Adaptivity, Structure, and Objectives in Sequential Decision Making
First employment: one-year postdoc at MIT followed by assistant professor at Northwestern IEMS beginning in Fall 2024

Xumei Xi, jointly supervised with Yudong Chen, graduated Aug 2024
Thesis title: Fine-Grained Analysis of Select Statistical Problems
First employment: Machine Learning Engineer at Pinterest

Tyler Sam, jointly supervised with Yudong Chen, graduated Aug 2025
Thesis title: Reinforcement Learning with Latent Low Rank Structure
First employment: Machine Learning Engineer at Google

PhD Advisees (current)

Mayleen Cortez, expected graduation May 2026

Ruijia Cao, expected graduation 2029

Tereza Oprea, jointly supervised with Arielle Anderer, expected graduation 2029

PhD Student Thesis Committees

Yiming Jiang, 2025, GATech ISYE, Advisor: He Wang

Dongyan (Lucy) Huo, 2025, Cornell ORIE, Advisors: Jim Dai and Yudong Chen

Chun Yin (Alex) Siu, 2024, Cornell CAM, Advisor: Gennady Samorodnitsky

Matthew Eichhorn, 2024, Cornell CAM, Advisor: Siddhartha Banerjee

Omar Darwiche Domingues, 2022, Inria Lille, Advisors: Emilie Kaufmann and Michal Valko

Raul Astudillo Marban, 2022, Cornell ORIE, Advisor: Peter Frazier

Invited Talks

Keynotes and Distinguished Lectures

"*Exploiting Structure in Reinforcement Learning*"
Keynote, ENSEEIHT Workshop on Reinforcement Learning for Stochastic Networks, Toulouse, France, June 2024

"*Beyond Matrix Completion: Discussion of Markov Lecture by Devavrat Shah*"
INFORMS APS Markov Lecture Discussant, Oct 2024

"*The SMART Approach to Instance-Optimal Online Learning*"
ACM SIGMETRICS Rising Stars Award Talk, June 2024

"*Overcoming the Long Horizon Barrier for Sample-Efficient RL with Latent Low-Rank Structure*"
Intel Rising Star Tech Talk, May 2022

"*Thy Friend is My Friend: Iterative Collaborative Filtering for Sparse Matrix Estimation.*"
Dantzig Award Finalist presentation at INFORMS Annual Meeting, Nov 2018

Tutorials

"*Causal Inference in Complex Systems with Network Interference and Temporal Dynamics*"
ACM SIGMETRICS Tutorial, June 2024

"*Causal Inference in the Presence of Network Interference*"
North American School of Information Theory Tutorial, June 2023
SIGMETRICS Workshop on Causal Inference for Engineers Tutorial, June 2023
CORS/INFORMS International Conference Tutorial, June 2022

"*Matrix Estimation*"
Tutorial, International Symposium on Information Theory, June 2018

Seminars and Colloquia

"*Entry-Specific Matrix Estimation under Arbitrary Sampling Patterns through the Lens of Network Flows*"
MIT Operations Research Center Seminar, Feb 2025

"*Causal Inference in the Presence of Network Interference with Low-Order Interactions*"

Northwestern IEMS Seminar, Dec 2024

"*The SMART Approach to Instance-Optimal Online Learning*"
Caltech RSRG/FALCON Seminar, Jan 2024

"*Exploiting Low Order Interactions for Causal Inference in the Presence of Network Interference*"
Amazon SCOT Science Seminar, Aug 2024

"*Exploiting Neighborhood Interference with Low Order Interactions under Unit Randomized Design*"
Oxford Nuffield Econometrics Seminar, Mar 2023
Online Causal Inference Seminar, Feb 2023

"*Adaptive Discretization in Online Reinforcement Learning*"
Northwestern Kellogg Operations Seminar, Oct 2022
Stanford GSB OIT Seminar, Nov 2022

"*Efficiently Exploiting Model Structure in Network Causal Inference with and without Knowledge of the Network*"
MIT Operations Research Center Seminar, Oct 2022
CMU Tepper Operations Research Seminar, Nov 2022
Stanford Statistics Seminar, Nov 2022

"*Simple yet Efficient Graph Agnostic Estimators for Network Causal Inference*"
Stanford RAIN Seminar, Mar 2022

"*Overcoming the Long Horizon Barrier for Sample-Efficient Reinforcement Learning with Latent Low-Rank Structure*"
Stochastic Networks, Applied Probability, and Performance (SNAPP) seminar, Feb 2022
Cornell Foundations of Information, Networks, and Decision Systems (FIND) seminar, Feb 2022

"*Sequential Fair Allocation: Achieving the Optimal Envy-Efficiency Tradeoff Curve*"
Arizona State University LIONS Seminar, Sept 2022
Symposium on Foundations of Responsible Computing, June 2022
Simons TOC4Fairness Seminar, Nov 2021
Institute for Foundations of Data Science (IFDS) Ethics & Algorithms SIG monthly seminar, Nov 2021
Sharif University of Technology IE Seminar, Aug 2021
Harvard Probabilitas Seminar, July 2021

"*Adaptive Discretization for Reinforcement Learning in Large Continuous Spaces*"
University of Michigan Communications and Signal Processing Seminar, Nov 2020

"*Adaptive Discretization for Sequential Decision Making in Large Continuous Spaces*"
Microsoft Research New York ML Seminar, Nov 2019
University of Washington ML Seminar, Oct 2019
Cornell CS Theory Seminar, Nov 2019
Cornell AI Seminar, Dec 2019

"*Iterative Collaborative Filtering for Sparse Noisy Tensor Estimation*"
Stanford ISL Seminar, Oct 2019
Cornell CS SCAN Seminar, Nov 2019
Cornell Probability Seminar, Oct 2019
UW Madison SILO Colloquium, Sept 2019
Cornell Statistics Seminar, Mar 2019

"*Thy Friend is My Friend: Iterative Collaborative Filtering for Sparse Matrix Estimation*"
California Institute of Technology RSRG/DOLCIT Seminar Series, Jan 2018

"*Latent Variable Model Estimation via Collaborative Filtering*"
Northwestern EECS Seminar, Oct 2017

"*Social Data Processing with Exchangeable Models*"
Microsoft Research New England Seminar, Mar 2017
CMU Machine Learning Department Seminar, Mar 2017
Cornell ORIE Colloquium, Feb 2017

"*Computing the Stationary Distribution Locally*"
Stanford SOAL Lab Seminar, May 2014

Other Invited Talks at Workshops and Conferences

"*Considerations in Designing Experiments under Network Interference*"
ACM SIGMETRICS Causal Inference Workshop, Stony Brook, NY, June 2025

"*Entry-Specific Matrix Estimation under Arbitrary Sampling Patterns through the Lens of Network Flows*"
INFORMS Applied Probability Society meeting, Atlanta, July 2025
Experimentation and Evaluation in Operations Workshop, Harvard Business School, May 2025
INFORMS Annual meeting, Oct 2024

"*Causal Inference in the Presence of Network Interference with Low-Order Interactions*"
Kohl Centre Workshop on Causality and ML/AI, Virginia Tech, Nov 2024

"*The SMART Approach to Instance-Optimal Online Learning*"
Simons Institute Data-Driven Decision Processes Workshop, Jan 2024
ESIF Economics and AI+ML Meeting, August 2024

"*Minimax Optimal Estimates of Individual Causal Effects in Panel Data under General Intervention Patterns*"
New York City Operations Day, May 2024

"*Exploiting Low Order Interactions for Causal Inference in the Presence of Network Interference*"
MIT AsuFest, June 2023
USC Statistics Empowering Data Science (SEEDS) Conference, Jan 2024

"*Exploiting Neighborhood Interference with Low Order Interactions under Unit Randomized Design*"
Harvard CMSA GRAMSIA Workshop on Graphical Models, Statistical Inference, and Algorithms, May 2023

"*Adaptive Discretization in Online Reinforcement Learning*"
Young European Queueing Theorists (YEQT) Workshop on Machine Learning for Stochastic Networks, Nov 2022

"*Efficiently Exploiting Model Structure in Network Causal Inference with and without Knowledge of the Network*"
Simons Institute Data Driven Decision Processes Seminar, Nov 2022
Simons Institute workshop on Graph Limits, Nonparametric Models, and Estimation, Sept 2022

"*Graph Agnostic Randomized Experimental Design under Heterogeneous Linear Network Interference*"
Simons Institute Workshop on Algorithmic Aspects of Causal Inference, Mar 2022
INFORMS Annual Meeting, Oct 2021, Oct 2022
Stochastic Networks Conference, June 2022
Cornell Econometrics Workshop, Apr 2022

"*Exploiting Structure in Reinforcement Learning*"
Theory of Reinforcement Learning Reunion Workshop at Simons Institute, Nov 2021

"*Overcoming the Long Horizon Barrier for Sample-Efficient RL with Latent Low-Rank Structure*"
SIAM Conference on Mathematics of Data Science (MDS), Sept 2022
Conference on Information Sciences and Systems (CISS) Conference, Mar 2022
Information Theory and its Applications, May 2022

"*Adaptive Discretization for Reinforcement Learning in Large Continuous Spaces*"
INFORMS Annual Meeting, Nov 2020
UC Berkeley Simons Institute Fellows seminar, Nov 2020

"*Tensor Estimation with Nearly Linear Samples*"
Information Theory and its Applications Conference in San Diego, Feb 2020

"*Adaptive Discretization for Sequential Decision Making in Large Continuous Spaces*"
Lightning Talk at IAS workshop on New Directions in RL and Control, Nov 2019

"*Matrix and Tensor Estimation in Action*"
Workshop at Open Data Science Conference, Nov 2019

"*Predictions for Sparse Datasets*"
Operations Research and Information Engineering field session for CURIE Academy, July 2019

"*Predictions in Excel through Estimating Missing Values*"
Workshop at Open Data Science Conference, May 2019

"*Nonparametric Contextual Bandits in an Unknown Metric Space*"
INFORMS Annual Meeting, Oct 2019

"*Iterative Collaborative Filtering for Sparse Noisy Tensor Estimation*"
Netflix Research, Oct 2019
Allerton Conference, Sept 2019
MIT MIFODS workshop, Aug 2019
International Symposium on Information Theory, July 2019
INFORMS Applied Probability Society Conference, July 2019
Machine Learning in Science and Engineering Workshop, June 2019
Conference on Information Sciences and Systems, Mar 2019
Information Theory and its Applications Conference in San Diego, Feb 2019

"*Thy Friend is My Friend: Iterative Collaborative Filtering for Sparse Matrix Estimation*"
Open Data Science Conference, May 2018
Allerton Conference, Oct 2017

"*Latent Variable Model Estimation via Collaborative Filtering*"
Summer School for Statistical Physics and Machine Learning in Scientific Institute of Cargese, Aug 2018

"*Approximating a Single Component of the Solution to a Linear System*"
University of Minnesota Workshop on Graphical Models, May 2015

Teaching Experience

Causal Inference (STSCI 3900)	Fall 2025
Systems Analysis, Behavior, & Optimization (SYSEN 5200)	Spring 2020-23, 2025
Statistical Principles (ORIE 6700)	Fall 2018, 2019, 2021, 2022, 2023, 2024
Information Systems and Analysis (ORIE 3800)	Spring 2019
Algorithms for Inference (6.438), Teaching Assistant	Fall 2015
MIT Teaching Certificate Program	Summer 2015
Design and Analysis of Algorithms (6.046)	Teaching Assistant, Fall 2013
Intro to Computer Science (CS1) and Python and C (CS11)	Dean's Tutor, 2009-10
Introduction to Computer Science (CS1), Teaching Assistant	Fall 2008

Professional Services

External committees and organizational roles

- ACM SIGMETRICS Tutorials Co-chair, 2024-2025
- Co-organizer for ACM SIGMETRICS Causal Inference Workshop, 2025
- INFORMS Applied Probability Society (APS) Council member, 2022-2024
- Co-chair for Women in Information Theory Society (WITHITS), 2019-2022
- Inaugural organizing committee for Stochastic Networks, Applied Probability, and Performance (SNAPP) seminar, 2020-2021
- Co-organizer for NIPS Workshop on Nearest Neighbor Methods 2017

Journal Editorial Board roles

- Associate Editor for Management Science, Jan 2026-current
- Associate Editor for Stochastic Systems, spring 2024-current

- Guest editor for IEEE Journal on Selected Areas in Information Theory special issue on estimation and inference, 2020

Technical Program committee member for

- ACM SIGMETRICS 2025
- ACM SIGMETRICS / IFIP Performance 2022, 2024
- IFIP Performance 2021
- ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization 2021
- International Joint Conferences on Artificial Intelligence (IJCAI), 2019
- International Conference on Machine Learning Workshops, 2020

Award Committee member for

- SIGMETRICS Rising Stars 2025
- SIGMETRICS Doctoral Dissertation Award 2022
- INFORMS APS Student Paper Award 2022, 2023
- Nicholson Award 2022, 2023
- IFIP Performance Best Paper Award 2021

Reviewer for

- INFORMS Mathematics of Operations Research 2024
- Applied Probability Journals 2024
- Management Science, 2019, 2020, 2021, 2022, 2023, 2024, 2025
- Operations Research, 2018, 2020, 2022, 2024
- Journal of Machine Learning Research (JMLR), 2018, 2019, 2020, 2021, 2022
- SIAM Journal on Mathematics of Data Science (SIMODS), 2019, 2021
- Springer Machine Learning Journal, 2021
- IEEE Transactions on Information Theory, 2015, 2019, 2021
- IEEE/ACM Transactions on Networking, 2021
- International Conference on Artificial Intelligence and Statistics (AISTATS), 2018, 2019, 2021
- IEEE International Symposium on Information Theory, 2017, 2020, 2021
- Reviewer for Neural Information Processing Systems Conference, 2016, 2018, 2019, 2020
- National Science Foundation, 2019, 2020, 2024
- Stochastic Systems, 2020
- International Conference on Machine Learning, 2018, 2020
- Journal of Computational and Graphical Statistics (JCGS), 2019
- ACM Symposium on Theory of Computing (STOC), 2019
- Reviewer for AAAI Conference on Artificial Intelligence, 2019
- Asian Conference on Machine Learning (ACML), 2019
- International Symposium on Theoretical Aspects of Computer Science, 2017
- IEEE Transactions on Network Science and Engineering, 2016
- Women in Machine Learning Workshop, 2016

Internal Service

- Cornell CAM PhD Admissions Committee Member, 2020, 2023
- Cornell ORIE MEng Admissions Committee Member, 2024, 2026
- Cornell ORIE Diversity Committee Member, 2021-2023
- Co-organizer for ORIE colloquium, 2018-2020, 2022-2023
- Cornell ORIE Faculty Search Committee Member, 2020-2022, 2024-2025
- Cornell freshman adviser, 2019-2020
- Co-coordinator for MIT LIDS student conference, 2014-2015
- MIT Laboratory for Information and Decision Systems Student Committee, 2011-2015
- Coordinator for *Facing Challenges, Overcoming Obstacles* Event as part of MIT GWAMIT Spring Empowerment conference, March 2012.