Siddhartha Banerjee

Associate Professor
School of Operations Research and Information Engineering
Cornell University
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Ithaca, NY 14853
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Research Interests

Stochastic modeling and *design of scalable algorithms and mechanisms* for large systems. In particular, my work spans across the following areas:

Data-Driven Decision-Making and Control - Stochastic control, online algorithms, reinforcement learning.
Pricing, Markets and Social Computing - game theory and mechanism design; pricing and revenue management; transportation systems.
Learning and Optimization on Networks - large-scale network algorithms; recommender systems; epidemic processes; queueing theory.

Current Position

Cornell University: Ithaca, NY, July 2021 - Present
Associate Professor: School of Operations Research and Information Engineering.
Field Member: Computer Science, Center for Applied Mathematics, Electrical and Computer Engineering.

Prior Positions

Cornell University: Ithaca, NY, July 2015 - June 2021
Assistant Professor: School of Operations Research and Information Engineering.

Stanford University: Stanford, CA, August 2013 - June 2015
Postdoctoral Researcher, Social Algorithms Lab (SOAL).

Education

The University of Texas at Austin, Austin, TX
PhD. in Electrical and Computer Engineering, 2013
Department of Electrical and Computer Engineering
Thesis: Controlling Complex Information Flows in Networks

Indian Institute of Technology Madras, Chennai, India
B.Tech. in Electrical Engineering, 2007.

Industry Experience

Technical consultant at **Lyft**, San Francisco, CA, Aug - Nov 2014, Jun - Dec 2018.

Research intern at **Technicolor Paris Research Lab:** Paris, France, Summer 2011.

Research intern at **Bell Labs, Alcatel-Lucent:** Murray Hill, NJ, Summer 2009.

Honors

INFORMS Applied Probability Best Publication Award (with Alessandro Arlotto, Daniel Freund, Itai Gurvich and Alberto Vera), 2021

NSF CAREER Award, 2019

INFORMS APS Undergraduate Student Paper Prize winner (for undergraduate collaborator Siddharth Reddy), 2017

INFORMS APS Student Paper Prize finalist (for graduate student collaborators Daniel Freund and Thodoris Lykouris), 2017

WNCG Student Leadership Award, UT Austin, 2013.

Governor's Gold Medal, *Institute Silver Medal*, IIT Madras, 2007.

PUBLICATIONS Google Scholar profile: Siddhartha Banerjee. For preprints, see my research page.

◇ **Book Chapters** (1)

Ridesharing
Siddhartha Banerjee, Ramesh Johari.
In *Sharing Economy: Making Supply Meet Demand, M. Hu (Ed.), Springer Series in Supply Chain Management*, 2019.

◇ **Journal Publications** (18)

Real-time approximate routing for smart transit systems
Noemie Perivier, Chamsi Hssaine, Samitha Samaranayake, Siddhartha Banerjee
ACM Measurement and Analysis of Computing Systems (ACM POMACS), 2021.
(Presented at *ACM SIGMETRICS'21*, June 2021.)

Pricing and Optimization in Shared Vehicle Systems
Siddhartha Banerjee, Daniel Freund, Thodoris Lykouris.
Operations Research, 2021.
(Earlier version presented at *ACM EC'17*, June 2017.)
INFORMS APS Student Paper competition finalist, 2017.

Computing Constrained Shortest-Paths at Scale
Alberto Vera, Siddhartha Banerjee, Samitha Samaranayake.
Operations Research, 2021.

Online Allocation and Pricing: Constant Regret via Bellman Inequalities
Alberto Vera, Siddhartha Banerjee, Itai Gurvich.
Operations Research, 2020.
INFORMS Applied Probability Best Publication winner, 2021.

The Bayesian Prophet: A Low-Regret Framework for Online Decision Making
Alberto Vera, Siddhartha Banerjee
Management Science, 2020.
(Earlier version presented at *ACM SIGMETRICS'19*, July 2019.)
INFORMS Applied Probability Best Publication winner, 2021.

Non-Monetary Mechanism Design via Artificial Currencies
Artur Gorokh, Siddhartha Banerjee, Krishnamurthy Iyer.
Mathematics of Operations Research, 2020.
(Combines results from **From Monetary to Non-Monetary Mechanism Design via Artificial Currencies** in *ACM EC'17*, June 2017, and **Near-Efficient Allocation in Repeated Settings** in *Web and Internet Economics (WINE'16)*, December 2016.)

Adaptive Discretization for Episodic Reinforcement Learning in Metric Spaces
Sean Sinclair, Siddhartha Banerjee, Christina Lee Yu.
ACM Measurement and Analysis of Computing Systems (ACM POMACS), 2020.
(Presented at *ACM SIGMETRICS'20*, June 2020.)

Predict and Match: Prophet Inequalities with Uncertain Supply
Reza Alijani, Siddhartha Banerjee, Sreenivas Gollapudi, Kamesh Munagala, Kangning Wang.
In *ACM Measurement and Analysis of Computing Systems (ACM POMACS)*, 2020.
(Presented at *ACM SIGMETRICS'20*, June 2020.)

The Segmentation-Thickness Tradeoff in Online Marketplaces
Reza Alijani, Siddhartha Banerjee, S. Gollapudi, Kostas Kollias, Kamesh Munagala.
ACM Measurement and Analysis of Computing Systems (ACM POMACS), 2019.
(Presented at *ACM SIGMETRICS'19*, June 2019.)

The Price of Fragmentation in Mobility-on-Demand Services
Thibault Séjourné, Samitha Samaranayake, Siddhartha Banerjee.
ACM Measurement and Analysis of Computing Systems (ACM POMACS), 2018.
(Presented at *ACM SIGMETRICS'18*, June 2018.)

Online Collaborative Filtering on Graphs
Siddhartha Banerjee, Sujay Sanghavi, Sanjay Shakkottai.
Operations Research, 2016.

The Price of Privacy in Untrusted Recommendation Engines
Siddhartha Banerjee, Nidhi Hegde, Laurent Massoulié.
IEEE Journal of Selected Topics in Signal Processing (Special Issue on Privacy), 2015
(Earlier version in *50th Allerton Conference*, October 2012.)

The Importance of Exploration in Online Marketplaces
Siddhartha Banerjee, Ramesh Johari, Zhengyuan Zhou.
IEEE Internet Computing, 2015.
(Earlier version in *IEEE CDC 2014*, December 2014.)

Epidemic Spreading with External Agents
Siddhartha Banerjee, Aditya Gopalan, Abhik Das, and Sanjay Shakkottai.
IEEE Transactions on Information Theory, 2014
(Earlier version in *IEEE INFOCOM 2011*, April 2011.)

Towards a Queueing-Based Framework for In-Network Function Computation
Siddhartha Banerjee, Piyush Gupta, Sanjay Shakkottai.
Queueing Systems - Theory and Applications (QUESTA), 2012
(Earlier version in *ISIT 2011*, July 2011.)

Wireless Scheduling with Heterogeneous Delayed Network-State Information
Aneesh Reddy, Siddhartha Banerjee, Aditya Gopalan, Sanjay Shakkottai, Lei Ying.
Queueing Systems - Theory and Applications (QUESTA), 2012.
(Earlier version in *48th Allerton Conference*, October 2010.)

Optimal Feedback Allocation For Cellular Uplink: Theory and Algorithms
Harish Ganapathy, Siddhartha Banerjee, Ned Dimitrov, Constantine Caramanis.
IEEE Transactions on Signal Processing, 2012.
(Earlier version in *47th Allerton Conference*, October 2009.)

Greedy Sensor Selection: Leveraging Submodularity
Manohar Shamaiah, Siddhartha Banerjee, Haris Vikalo.
IEEE Wireless Communications Letters, 2012.
(Earlier version in *IEEE CDC 2010*, December 2010.)

◇ **Refereed Conference Publications** (23)
(Not subsumed by journal versions)

Fair and Efficient Allocation with Quotas
Siddhartha Banerjee, Matthew Eichhorn, David Kempe.
In *ACM FORC'22*, June 2022.

Sequential Fair Allocation: Achieving the Optimal Envy-Efficiency Tradeoff Curve
Sean Sinclair, Siddhartha Banerjee, Christina Lee Yu.
In *ACM SIGMETRICS'22*, June 2022.

Online Nash Social Welfare Maximization with Predictions
Siddhartha Banerjee, Vasilis Gkatzelis, Artur Gorokh, Billy Jin
In *ACM SODA'22*, January 2022.)

The Remarkable Robustness of the Repeated Fisher Market
Artur Gorokh, Siddhartha Banerjee, Krishnamurthy Iyer
In *ACM EC'21*, June 2021.)

Threshold Tests as Quality Signals: Optimal Strategies, Equilibria, and Price of Anarchy
Siddhartha Banerjee, David Kempe, Robert Kleinberg
In *Web and Internet Economics (WINE'21)*, December 2021.

Multimodal Mobility Systems: Joint Optimization of Transit Network Design and Pricing
Qi Luo, Samitha Samaranayake, Siddhartha Banerjee.
In *ACM ICCPS'21*, March 2021.

Adaptive Discretization for Model-Based Reinforcement Learning
Sean Sinclair, Tianyu Wang, Gauri Jain, Siddhartha Banerjee, Christina Lee Yu.
In *NeurIPS'20*, December 2020.

Uniform Loss Algorithms for Online Stochastic Decision-Making With Applications to Bin Packing
Siddhartha Banerjee, Daniel Freund
In *ACM SIGMETRICS'20*, July 2020.

Information Signal Design for Incentivizing Team Formation
Chamsi Hssaine, Siddhartha Banerjee
In *Web and Internet Economics (WINE'18)*, December 2018.

The Value of State Dependent Control in Ride-sharing Systems
Siddhartha Banerjee, Yash Kanora, Pengyu Qian
In *ACM SIGMETRICS'18*, July 2018.

Segmenting Two-Sided Markets
Siddhartha Banerjee, Srinivas Gollapudi, Kostas Kollias, Kamesh Munagala.
In *26th International World Wide Web Conference (WWW'17)*, April 2017.

Sublinear Estimation of a Single Element in Sparse Linear Systems
Nitin Shyamkumar, Siddhartha Banerjee, Peter Lofgren.
In *54th Allerton Conference*, October 2016.

Unbounded Human Learning: Optimal Scheduling for Spaced Repetition
Siddharth Reddy, Igor Labutov, Siddhartha Banerjee, Thorsten Joachims.
In *ACM SIGKDD'16*, August 2016.
INFORMS Undergraduate Student Paper Award, 2017.

Network Formation of Coalition Loyalty Programs
Arpit Goel, Vijay Kamble, Siddhartha Banerjee, Ashish Goel.
In *NetEcon'16*, June 2016.

Personalized PageRank Estimation and Search: A Bidirectional Approach
Peter Lofgren, Siddhartha Banerjee, Ashish Goel.
In *ACM WSDM'16*, February 2016.

Pricing in Ride-Share Platforms: A Queueing-Theoretic Approach
Siddhartha Banerjee, Ramesh Johari, Carlos Riquelme.
In *ACM EC'15*, June 2015.)

Bidirectional PageRank Estimation: From Average-Case to Worst-Case
Peter Lofgren, Siddhartha Banerjee, Ashish Goel.
In *WAW'15*, December 2015

Fast Bidirectional Probability Estimation in Markov Models
Siddhartha Banerjee, Peter Lofgren.
In *NIPS'15*, December 2015.

Re-incentivizing Discovery: Mechanisms for Progress Sharing in Research
S. Banerjee, A. Goel, A. Krishnaswamy.
In *ACM EC'14*, June 2014.

FAST-PPR: Scaling Personalized PageRank Estimation for Large Graphs
Peter Lofgren, Siddhartha Banerjee, Ashish Goel, C. Seshadri.
In *ACM SIGKDD'14*, August 2014.

The Behavior of Epidemics under Bounded Susceptibility
Subhashini Krishnasamy, Siddhartha Banerjee, Sanjay Shakkottai.
In *ACM SIGMETRICS'14*, June 2014.

Epidemic Thresholds with External Agents
Siddhartha Banerjee, Avhishek Chatterjee, Sanjay Shakkottai.
In *IEEE INFOCOM'14*, April 2014.

Greedy Learning of Markov Network Structure
Praneeth Netrapalli, Siddhartha Banerjee, Sujay Sanghavi, Sanjay Shakkottai.
In *48th Allerton Conference*, October 2010.

◇ **Preprints and Working papers** (6)

Learning to Team: Online Learning for Bivariate Boolean Functions
Siddhartha Banerjee, Matthew Eichhorn, David Kempe.
Working paper, 2022.

Proportionally Fair Online Allocation of Public Goods
Siddhartha Banerjee, Vasilis Gkatzelis, Safwan Hossain, Billy Jin, Evi Micha, Nisarg Shah
Working paper, 2022.

The Limits of an Information Intermediary in Auction Design
Chamsi Hssaine, Siddhartha Banerjee, Vijay Kamble
Working paper, 2020. Available at https://ssrn.com/abstract_id=3544350

Pseudo-Competitive Games and Algorithmic Price Competition
Reza Alijani, Siddhartha Banerjee, Kamesh Munagala, Kangning Wang
Working paper, 2020. Available at https://arxiv.org/abs/2009.11841

The Power and Limits of Collusion-Resilient Mechanism Design
Artur Gorokh, Siddhartha Banerjee, Krishnamurthy Iyer.
Under submission, 2019. Available at https://ssrn.com/abstract_id=3125003

A Pricing Framework for the Mobility Marketplace
Chamsi Hssaine, Raga Gopalakrishnan, Siddhartha Banerjee, Samitha Samaranayake
Working paper, 2019.

Grants

CNS-1955997: Resource Constrained Reinforcement Learning for Computing Systems, co-PI, *National Science Foundation (NSF)*, July 2020 - July 2024 ($1,200,000)

ECCS-1847393: CAREER: Harnessing Prediction Engines and Non-Monetary Mechanisms for Real-Time Decision Making, PI, *National Science Foundation (NSF)*, March 2019 - February 2024 ($500,549)

CNS-1952011 SCC-IRG Track 1: Mobility for all - Harnessing Emerging Transit Solutions for Underserved Communities, Faculty Associate, *National Science Foundation (NSF)*, October 2020 - September 2024 ($2,134,898)

Engaged Cornell Grant: Engaging Industry in Applied Mathematics , co-PI, *Engaged Cornell*, June 2019 - June 2020 ($80,000)

DMS-1839346: The Future of the Road - A Data-Driven Redesign of the Urban Transit Ecosystem, PI, *National Science Foundation (NSF)*, Oct 2018 - Oct 2020 ($425,000)

Engaged Cornell Grant: Applied Mathematics in Action, co-PI, *Engaged Cornell*, June 2018 - June 2019 ($20,000)

W911NF-17-1-0094: Operations and the Sharing Economy: Mechanisms for On-Demand Resource Sharing, PI, *Army Research Laboratory (ARL)*, July 2017 - July 2020 ($399,659)

Professional Service

Publications Chair: SIGMETRICS 2017
Workshop Chair: IFIP Performance 2017
Senior TPC Member: WWW 2022
TPC Member: SIGMETRICS 2021, 2020, 2019, 2018, 2016; EC 2022, 2021, 2020, 2019, 2018, 2017, 2016, NetEcon 2020, 2019, 2018, 2017, IFIP Performance 2020, 2019, 2018, 2017, MSOM Service Sig 2022, 2019, 2018.
Prize Committee: Nicholson Prize 2020, 2019 *Journal Reviewer*: Math of OR, Operations Research, Management Science, QUESTA, IEEE Trans. Networking, IEEE Trans. Mobile Computing, IEEE Trans. Signal Processing.
Organizer: Cornell ORIE Colloquium (2015-18, 2021-22)
RAIN seminar series at Stanford (2013 - 2015)
WNCG Seminar (2012 - 2013), WNCG student seminar (2009 - 2012) at UT Austin.

Teaching Experience

ORIE 4580, Simulation Modeling & Analysis: Fa'17, Fa'18, Fa'20.

ORIE 6180, Online Decision-Making & Market Design: Sp'16, Sp'19, Fa'21.

ORIE 4742, Information Theory & Bayesian ML: Sp'20, Sp'21.

ORIE 6500, Introduction to Stochastic Processes: Fa'19.

ORIE 5582, Monte Carlo Methods in Financial Engineering: Sp'22.

ORIE 7591, Markov Chain Mixing and Applications:, Sp'18.

ORIE 4154, Pricing and Market Design: Sp'17.

ORIE 6154, Revenue Management: Fa'16.

ORIE 4520, Stochastics at Scale: Fa'15.

Advising Experience

◇ **Postdoctoral Researchers**

Qi Luo, 2019-2020
Jointly supervised with Samitha Samaranayake
Started at Industrial Engineering, Clemson University as Assistant Professor (2021)

Ragavendran Gopalakrishnan, 2017-2019
Jointly supervised with Samitha Samaranayake
Started at Smith School of Business, Queens College as Assistant Professor (2019)

◇ **PhD Advisees**

Laurel Newman, Cornell ORIE, 2020-

Matthew Eichhorn, Cornell CAM, 2019-

Sean Sinclair, Cornell ORIE, 2018-
Jointly supervised with Christina Lee Yu

Chamsi Hssaine, Cornell ORIE, 2016-

Artur Gorokh, Cornell CAM, 2015-2020
Thesis: *Fairness and Efficiency in Online Allocation of Goods*
Jointly supervised with Kris Iyer
Joined Facebook as Research Scientist (2020)

Alberto Vera, Cornell ORIE, 2015-2020
Thesis: *Real-Time Network Optimization: Practical Algorithms with Provable Guarantees*
Joined Amazon as Research Scientist (2020)

◇ **PhD Student Thesis Committees**

Richard Shapley, Cornell ORIE, Advisor: David Shmoys

Marios Papachristou, Cornell CS, Advisor: Jon Kleinberg

Zhi Liu, Cornell ORIE, Advisor: Nikhil Garg

Alyf Janmohamed, Cornell ORIE, Advisor: Shane Henderson

Ziyun Wei, Cornell CS, Advisor: Immanuel Trummer

Kunal Pattanayak, Cornell ECE, Advisor: Vikram Krishnamurthy

Renee Mirka, Cornell CS, Advisor: David Williamson

Billy Jin, Cornell ORIE, Advisor: David Williamson
John Massey Casshore, Cornell ORIE, Advisor: Peter Frazier
Wangwei Wu, Cornell Systems Engineering, Advisor: Ricardo Daziano
Ariah Klages-Mundt, Cornell CAM, Advisor: Andreea Minca
Huanyu Zhang, 2021, Cornell ECE, Advisor: Jayadev Acharya
Matthew Zalesak, 2021, Cornell ORIE, Advisor: Samitha Samaranayake
Yilun Chen, 2021, Cornell ORIE, Advisor: David Goldberg
Reza Alijani, 2020, Duke CS, Advisor: Kamesh Munagala
Faisal Alkaabneh, 2020, Cornell Systems Engineering, Advisor: Oliver Gao
Yingjie Fei, 2020, Cornell ORIE, Advisor: Yudong Chen
Daniel Vial, 2020, Michigan EECS, Advisor: Vijay Subramananian
Thodoris Lykouris, 2019, Cornell CS, Advisor: Eva Tardos
David Lingenbrink, 2019, Cornell ORIE, Advisor: Kris Iyer
Pu Yang, 2019, Cornell ORIE, Advisor: Kris Iyer & Peter Frazier
Venus Lo, 2019, Cornell ORIE, Advisor: Husseyin Topaloglu
Yang Liu, 2019, Cornell CEE, Advisor: Samitha Samaranayake
Zhen Tan, 2018, Cornell CEE, Advisor: Oliver Gao

◇ **Undergraduate Collaborators**
Juntao Ren, Cornell CS.
Logan Kraver, Cornell CS.
Jasmine Samadi, Cornell CS.
Dave Jung, Cornell CS.
David Wolfers, Cornell CS.
Christopher Archer, Cornell ORIE.
Carrie Rucker, 2021, Cornell ORIE, Business Analyst at Capital One.
Max Solberg, 2021, Cornell ORIE, Technology Associate at Morgan Stanley.
Gauri Jain, 2020, Cornell CS. Graduate student at Harvard EECS
Clare Snyder, 2019, Cornell IS. Graduate student at Michigan Ross School of Business
Xiang (Felix) Fu, 2019, Cornell CS. Graduate student at MIT EECS
Noemie Perivier, 2019, Ecole Polytechnique. Graduate student at Columbia DRO
Thibault Séjourné, 2018, Ecole Polytechnique. Graduate student at ENS Paris
Nitin Shyamkumar, 2017, Cornell CS. Graduate student at NYU Courant
Siddharth Reddy, 2017, Cornell CS. Graduate student at EECS, UC Berkeley

INVITED TALKS

Fairness-Efficiency Tradeoffs in Online Allocation
– MIT ORC Seminar, MIT, Cambridge MA, February 2022
– Centre for Networked Intelligence (CNI) Seminar, EECS Division, Indian Institute of Science, Bengaluru, India, December 2021
– Dana Clyman Seminar Series, UVA Darden, Charlottesville VA, November 2021
– Online and Matching-Based Market Design Reunion Workshop, Simons Institute for

the Theory of Computing, Berkeley CA, March 2021
– AI Seminar, Cornell University, Ithaca NY, March 2021

Predictions, Promises and Pseudomarkets Fairness in Sequential Decision-Making
– Theory of Computing for Fairness online seminar series, October 2021
– Industrial and Systems Engineering Seminar, University of Illinois Urbana-Champaign, Urbana IL, February 2021

Multi-Modal Transit Platforms
– Google Algorithms Workshop Series on Markets, Mobility, and the Mind, May 2021

We Need to Talk About how we Talk About Online Decision-Making
– Stern OM seminar, NYU Stern, New York NY, April 2021
– Stochastic Networks, Applied Probability, and Performance (SNAPP) Online Seminar Series, February 2021

Constant Regret Algorithms for Online Decision-Making
– Management Science and Operations Seminar, London Business School, January 2021
– Foundations of Data Science ML Seminar, University of Texas at Austin, Austin TX, May 2020
– Industrial & Operations Engineering Department Seminar, University of Michigan, Philadelphia PA, March 2020
– UPenn Theory Seminar, University of Pennsylvania, Philadelphia PA, February 2020
– MSR ML Seminar, Microsoft Research New York, New York NY, December 2019

The Unreasonable Effectiveness of Artificial Currencies
– Workshop on Platform Markets, Simons Institute Program on Online and Matching-Based Market Design, Berkeley CA, September 2019

Designing the Multi-Modal Transit Marketplace
– NSF Workshop on Control for Networked Transportation Systems, Philadelphia PA, July 2019

Ridesharing: The Road Ahead
– Real-Time Decision Making Reunion Workshop, Simons Institute for the Theory of Computing, Berkeley CA, June 2019

The Unreasonable Effectiveness of Artificial Currencies
– Institute for Mathematical Behavioral Sciences (IMBS) Seminar, University of California Irvine, Irvine CA, May 2019

Online Decision-Making Using Prediction Oracles
– Communications and Signal Processing Seminar, Michigan EECS, Michigan University, Ann Arbor MI, April 2019

Trace-Driven Online Decision-Making
– Conference on Information Sciences and Systems (CISS 2019), Johns Hopkins University, Baltimore MD, March 2019

Online Decision-Making Using Prediction Oracles
– Quantitative Methods Seminar, Krannert School of Business, Purdue University, West Lafayette IN, October 2018

Designing Decentralized Markets: Artificial Currencies and Collusion Resilience
– Workshop on Marketplace Innovation, June 2018

A Bayesian Approach to Online Resource Allocation
– Workshop on Mathematical and Computational Challenges in Real-Time Decision Making, Simons Institute Program on Real-Time Decision Making, Berkeley CA, May 2018

Allocating Resources, in the Future
– RAIN Seminar series, Stanford University, Palo Alto CA, April 2018
– BLISS Seminar, UC Berkeley, Berkeley CA, April 2018
– IEOR-DRO Joint Seminar, Columbia University, New York City NY, April 2018

The Rideshare Dispatch Problem
– Societal Networks Workshop, Simons Institute Program on Real-Time Decision Making, Berkeley CA, March 2018

The Rideshare Dispatch Problem
– Societal Networks Workshop, Simons Institute Program on Real-Time Decision Making, Berkeley CA, January 2018

Ridesharing
– Bootcamp Workshop, Simons Institute Program on Real-Time Decision Making, Berkeley CA, January 2018

Pricing in Dynamic Two-Sided Markets
– 55th Annual Allerton Conference, Urbana-Champaign IL, October 2017

Personalization, for everyone
– Texas Wireless Summit, UT Austin, Austin TX, October 2017

The Power of Bidirectional Estimators
– Los Alamos National Laboratories, Los Alamos NM, June 2017
– Stanford University ISL Colloquium, Stanford University, Palo Alto CA, February 2016

Pricing and Optimization in Shared Vehicle Systems
– Mostly OM Workshop, Beijing, China, May 2017
– NII Workshop on Optimization under Uncertainty, Shonan, Japan, May 2017
– Department Seminar at Georgia Tech ISYE, Atlanta GA, December 2016

Dynamic Pricing in Rideshare Platforms
– Simons Institute Workshop on Real-Time Decision Making, Berkeley CA, June 2016
– Duke University CS-Econ Colloquium, Durham NC, April 2016

What Money Can't Buy - Beyond Pricing in Online Marketplaces
– Cornell CS Theory Seminar, Ithaca NY, November 2016

Sublinear Estimation of a Single Element in Sparse Linear Systems
– 54th Annual Allerton Conference, Urbana-Champaign IL, October 2016

Fast Bidirectional Estimation in Markov Chains
– Cornell CAM Colloquium, Ithaca Ny, September 2015
– Indian Institute of Science, Bangalore, India, July 2015
– WNCG Seminar Series at UT Austin, Austin TX, May 2015

New Models and Mechanisms for Online Platforms
– Baskin School of Engineering at UC Santa Cruz, Santa Cruz CA, February 2015
– NYU Stern IOMS Seminar, New York City NY, January 2015
– Cornell ORIE Department Seminar, Ithaca NY, January 2015
– MEDS Department Seminar at Kellogg, Evanston IL, December 2014