

Siddhartha Banerjee

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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 Erlang Prize, 2022*
INFORMS Applied Probability Best Publication Award (awarded once every 2 years for best INFORMS APS publication), 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**

Ridesharing

Siddhartha Banerjee, Ramesh Johari.

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

◇ **Journal Publications**

The Limits of an Information Intermediary in Auction Design

Reza Alijani, Siddhartha Banerjee, Kamesh Munagala, Kangning Wang

Mathematics of Operations Research, 2023.

(Earlier version presented at *ACM EC'22*, July 2022.)

Sequential Fair Allocation: Achieving the Optimal Envy-Efficiency Tradeoff Curve

Sean Sinclair, Gauri Jain, Siddhartha Banerjee, Christina Lee Yu.

Operations Research, 2023.

(Earlier version presented at *ACM SIGMETRICS'22*, June 2022.)

INFORMS DEI Best Student Paper finalist, 2022

Adaptive Discretization for Model-Based Reinforcement Learning

Sean Sinclair, Siddhartha Banerjee, Christina Lee Yu.

Operations Research, 2023.

(Builds on an earlier version titled **Adaptive Discretization for Model-Based Reinforcement Learning** by Sean Sinclair, Tianyu Wang, Gauri Jain, Siddhartha Banerjee, Christina Lee Yu, presented at *NeurIPS'20*, December 2020.)

Real-time approximate routing for smart transit systems

Noemie Perivier, Chamsi Hssaine, Samitha Samaranyake, 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 Samaranyake.

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**

(Not subsumed by journal versions)

Online Fair Allocation with Perishable Resources

Sean Sinclair, Chamsi Hssaine, Siddhartha Banerjee

In *ACM SIGMETRICS'23*, June 2023.

Proportionally Fair Online Allocation of Public Goods

Siddhartha Banerjee, Vasilis Gkatzelis, Safwan Hossain, Billy Jin, Evi Micha, Nisarg Shah

In *IJCAI'23*, August 2023.

Dynamic Interventions for Networked Contagions

Marios Papachristou, Siddhartha Banerjee, Jon Kleinberg

In *ACM TheWebConf'23*, April 2023.

Graph Searching with Predictions

Siddhartha Banerjee, Vincent Cohen-Addad, Anupam Gupta, Zhouzi Li

In *ITCS'23*, January 2023.

Online Team Formation Under Different Synergies

Siddhartha Banerjee, Matthew Eichhorn, David Kempe.

In *Web and Internet Economics (WINE'22)*, December 2022.

Fair and Efficient Allocation with Quotas

Siddhartha Banerjee, Matthew Eichhorn, David Kempe.

In *ACM FORC'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.

ORSuite: Benchmarking Suite for Sequential Operations Models

Christopher Archer, Siddhartha Banerjee, Mayleen Cortez, Carrie Rucker, Sean R. Sinclair, Max Solberg, Qiaomin Xie, Christina Yu

In *ACM SIGMETRICS Performance Evaluation Review (PER)*, 2021.

Multimodal Mobility Systems: Joint Optimization of Transit Network Design and Pricing

Qi Luo, Samitha Samaranyake, Siddhartha Banerjee.

In *ACM ICCPS'21*, March 2021.

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)**

Pseudo-Competitive Games and Algorithmic Price Competition

Chamsi Hssaine, Siddhartha Banerjee, Vijay Kamble
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

FA9550-23-1-0068: Pseudo-markets for Public Resource Allocation, co-PI, *Air Force Office of Scientific Research (AFOSR)*, January 2023 - January 2026 (\$900,000)

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)

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)

Siddhartha Banerjee

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)
 - ◇ **Current Advisees**
 - Qian Xie**, Cornell ORIE, 2021-
 - Laurel Newman**, Cornell ORIE, 2020-
 - Matthew Eichhorn**, Cornell CAM, 2019-
 - Sean Sinclair**, Cornell ORIE, 2018-
Jointly supervised with Christina Lee Yu
 - ◇ **PhD Alumni**
 - Chamsi Hssaine**, Cornell ORIE, 2016-2022 Thesis: *Competition, Cooperation, and People-Centric Operations*
Joining USC Marshall School of Business as Assistant Professor (2022)
 - 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 Samaranyake
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 Subramanian
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 Samaranyake
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

Constant Regret via Model-Predictive Control

- Workshop on Algorithms for Learning and Economics (WALE 2022), Naxos, Greece, June 2022
- Bernoulli Center workshop on Algorithms with Predictions (ALPS 2022), EPFL, Lausanne, Switzerland, May 2022
- OPTML++ Seminar, MIT, Cambridge MA, May 2022

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

Siddhartha Banerjee

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