

Curriculum vitae for **Adam Wierman**

CONTACT DETAILS

Computing and Mathematical Sciences
California Institute of Technology
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RESEARCH OVERVIEW

My research strives to make the networked systems that govern our world sustainable and resilient. My group develops new mathematical tools in machine learning, optimization, control, and economics and applies these tools to design new algorithms and markets that can be deployed in data centers, the electricity grid, transportation systems, and beyond.

RESEARCH KEYWORDS

Sustainable computing; Network economics; Power systems; Online algorithms; Scheduling and resource allocation; Distributed Systems; Stochastic Networks.

EMPLOYMENT

- 2015-pres Professor of Computing and Mathematical Sciences
 Director of Information Science and Technology
 Executive officer (a.k.a. Department Chair) 2015-2020
 California Institute of Technology
- 2012-2015 Professor of Computer Science
 California Institute of Technology
- 2007-2012 Assistant Professor of Computer Science
 California Institute of Technology

EDUCATION

- 2007 Ph.D. in Computer Science
 Carnegie Mellon University, Pittsburgh, PA
 Advised by Mor Harchol-Balter.
 Thesis committee: Mor Harchol-Balter, John Lafferty, Bruce Maggs,
 Alan Scheller-Wolf, and Ward Whitt.
- 2004 Masters of Science in Computer Science
 Carnegie Mellon University, Pittsburgh, PA
 Advised by Mor Harchol-Balter.
- 2001 B.S. in Computer Science with an additional major in Mathematics,
 and minors in Psychology and Statistics
 Carnegie Mellon University, Pittsburgh, PA

SELECTED HONORS AND AWARDS

- 2017** **Caltech ASCIT teaching award recipient**
2017 Paper "Data Center Demand Response: Avoiding the coincident peak via workload shifting and local generation" named one of the most cited papers in Performance Evaluation during 2014-2016.
- 2016 Coauthor of ACM Greenmetrics "Best Student Paper" award recipient
- 2014** **Coauthor of IEEE Communication Society William R. Bennet Prize recipient.** Award recognizes the "best original paper published in any journal associated with the IEEE Communication Society in the previous 3 calendar years."
- 2013 Coauthor of IFIP Performance "Best Student Paper" award recipient.
- 2013 Coauthor of IEEE Power & Energy Society (PES) General Meeting "Best Paper on System Operations and Market Economics" award recipient
- 2013 Coauthor of IEEE Sustainable Computing Register "Pick of the month" for April
- 2013** Research on Sustainable Data centers included in the "**HP NetZero Data Center Architecture,**" which was named a **Computerworld Honors Laureate**
- 2012 Coauthor of IEEE Green Computing Conference (IGCC) "Best Paper" award recipient
- 2012 Student Minghong Lin received an IBM Ph.D. Fellowship
- 2011** **ACM Sigmetrics "Rising Star" award recipient.** Award given in recognition of "outstanding contributions in the design and analysis of scheduling insights into policies, which provided fundamental scheduling and fairness in modern computing systems."
- 2011 Coauthor of IEEE Infocom "Best Paper" award recipient
- 2011 Coauthor of ACM Greenmetrics "Best Student Paper" award recipient
- 2010 Coauthor of IFIP Performance "Best Paper" award recipient
- 2010** **Caltech ASCIT teaching award recipient**
- 2010 Visiting Fellow at the Isaac Newton Institute of Mathematical Sciences
- 2009** **NSF CAREER grant recipient**
- 2008 Okawa Foundation grant recipient
- 2008 Finalist for the Microsoft New Faculty Fellowship
- 2008 Honorable Mention for the INFORMS Doctoral Dissertation Award for Operations Research in Telecommunications
- 2008** **CMU School of Computer Science Distinguished Dissertation Award recipient**
- 2007 Named a Siebel Scholar
- 2006** **Carnegie Mellon Graduate Student Teaching Award recipient**
- 2005 Alan J. Perlis School of Computer Science Student Teaching Award recipient
- 2005 Carnegie Mellon Graduate Student Teaching Award Honorable Mention
- 2003 Coauthor of ACM Sigmetrics "Best Student Paper" award recipient
- 2003-2006 National Science Foundation Graduate Fellowship recipient

PROFESSIONAL SERVICE

Editorial positions

- 2019-pres INFORMS Journal of Computing associate editor
- 2019-pres ACM Sigmetrics Board of Directors
- 2015-2019 ACM Sigmetrics Vice-Chair
- 2015-2016 Guest editor of special issue for Queueing Systems (QUESTA)
- 2014-pres ACM Transactions on Modeling and Performance Evaluation of Computing Systems (TOMPECS) associate editor
- 2014-2019 IEEE Transactions on Networking (ToN) associate editor
- 2014-2016 Sustainable Energy, Grids & Networks (SEGAN) editorial board
- 2014-pres IEEE Transactions on Network Science and Engineering (TNSE) associate editor
- 2013-2018 Queueing Systems (QUESTA) editorial board

2013-2015 IEEE Transactions on Cloud Computing (TCC) editorial board
2013-2014 Guest editor of special issue for ACM Transactions on Internet Technology (TOIT)
2012-2016 Operations Research (OR) associate editor
2011-2015 ACM Sigmetrics Board of Directors
2010-2016 Performance Evaluation (PEVA) editorial board

Conference-related duties:

2021 Program Committee: ACM Sigmetrics
2021 Program Committee: Reinforcement Learning & Queues
2020 Program Committee: IFIP Performance
2020 Program Committee: ACM Sigmetrics
2020 Highlights Beyond EC Committee
2020 Program Committee: ACM MAMA
2019 Program Committee: IFIP Performance
2019 Program Committee: ACM Sigmetrics
2019 Program Committee: ACM EC
2019 Program Committee: ACM MAMA
2019 Program Committee: ACM Energy Market Engineering Workshop
2018 Program Committee: ACM EC
2018 Program Committee: INFORMS APS
2018 Program Committee: IFIP Performance
2018 Program Committee: ACM MAMA
2018 Program co-Chair: ACM Sigmetrics
2017 Program Committee: IFIP Performance
2017 Program Committee: ACM Sigmetrics
2017 Steering Committee: ACM Greenmetrics
2017 Program Committee: ACM MAMA
2016 Program Committee: NSDI
2016 Program co-Chair: “Algorithms & Uncertainty” long program at the Simons Institute
2016 Conference co-Chair: Southern California Network Economics Game Theory (SoCal NEGТ)
2016 Steering Committee: ACM Greenmetrics
2016 Program Committee: Workshop on Economics of Cloud Computing
2016 Program Committee: ACM MAMA
2016 Program Committee: ACM e-Energy
2015 Conference co-Chair: Southern California Network Economics Game Theory (SoCal NEGТ)
2015 Program Committee: ACM MAMA
2015 SIG Webmaster: ACM Sigmetrics
2015 Program Committee: ACM EC
2015 Program Committee: ACM Sigmetrics
2015 Program Committee Chair: NetEcon
2014 Conference co-Chair: Southern California Network Economics Game Theory (SoCal NEGТ)
2014 Steering Committee: ACM Greenmetrics
2014 Program Committee: ACM MAMA
2014 SIG Webmaster: ACM Sigmetrics
2014 Program Committee: ACM EC
2014 Program Committee: ACM eEnergy
2014 Program Committee: NetEcon, joint with WPIN
2014 Program Committee: European Conference on Queueing Theory (ECQT)
2014 Program Committee: “Mathematics of Planet Earth” series at DIMACS
2013 Conference co-Chair: Southern California Network Economics Game Theory (SoCal NEGТ)
2013 SIG Webmaster: ACM Sigmetrics

2013 Program Committee: IEEE SmartGridComm
 2013 Program Committee: IFIP Performance
 2013 Steering Committee: ACM Greenmetrics
 2013 Program Committee: ACM WPIN + NetEcon
 2013 Program Committee: IEEE Green Computing Conference
 2013 Program Committee: ACM MAMA
 2013 Program Committee: ACM EC
 2013 Program Committee: ACM Sigmetrics
 2013 Program Committee: IEEE ICDCS
 2012 Conference co-Chair: Southern California Network Economics Game Theory (SoCal NEGT)
 2012 SIG Webmaster: ACM Sigmetrics
 2012 Steering Committee: ACM Greenmetrics
 2012 Program Committee: Workshop on Pricing and Incentives in Networks (WPIN)
 2012 Program Committee: ACM Sigmetrics/Performance
 2012 Program Committee: ACM Greenmetrics
 2012 Program Committee: ACM MAMA
 2012 Program Committee: WWW
 2012 Program Committee: INFORMS MSOM
 2012 Program Committee: DCPerf
 2011 SIG Webmaster: ACM Sigmetrics
 2011 Program Committee: ACM Greenmetrics
 2011 Conference co-Chair: Southern California Network Economics Game Theory (SoCal NEGT)
 2011 Program Committee: IEEE Workshop on Green and Sustainable Communication Networks
 2011 Program Committee: Conference on Utility and Cloud Computing (UCC)
 2011 Program Committee: IEEE ITC-23
 2011 Program Committee: IFIP Performance
 2011 Program Committee: ACM Sigmetrics
 2011 Program Committee: ICST ValueTools
 2010 SIG Webmaster: ACM Sigmetrics
 2010 Conference co-Chair: Southern California Network Economics Game Theory (SoCal NEGT)
 2010 Program Committee: ACM Greenmetrics
 2010 Program Committee: EXERT Workshop
 2010 Program Committee: IEEE ITC-22
 2010 Program Committee: IFIP Performance
 2010 Program Committee: ACM Sigmetrics
 2010 Conference co-Chair: ACM Hotmetrics
 2010 Program Committee: Newton Institute Stochastic Processes in Comm. Sciences (SCS)
 2009 Conference co-Chair: Southern California Network Economics Game Theory (SoCal NEGT)
 2009 SIG Webmaster: ACM Sigmetrics
 2009 Conference co-Chair: EURANDOM Young European Queueing Theorists Symposium (YEQT-III)
 2009 Discussant: ACM Hotmetrics
 2009 Program Committee: Net-COOP
 2009 Program Committee: ACM Hotmetrics
 2009 Program Committee: ACM Greenmetrics
 2009 Program co-Chair: IEEE ICCCN Network Algorithms and Perf. Eval. Track
 2009 Program Committee: ACM Sigmetrics/Performance
 2009 Program Committee: IEEE ITC-21
 2009 Best Paper Committee: IEEE Mascots
 2009 Program Committee: IEEE Mascots
 2009 Conference Webmaster: ACM Sigmetrics
 2008 SIG Webmaster: ACM Sigmetrics
 2008 Discussant: ACM Hotmetrics

2008 Publicity co-Chair: ACM Sigmetrics
2008 Program Committee: ACM Sigmetrics
2008 Program Committee: IEEE Mascots
2007 Program Committee: ACM Sigmetrics
2007 Conference Webmaster: ACM Sigmetrics
2007 Best Paper Committee: ACM Sigmetrics

Invited Referee for Journals and Conferences (each listed only once):

Nature, Journal of the ACM (JACM), IEEE Transactions on Networking (ToN), Operations Research (OR), Annals of Operations Research (ANOR), Management Science (MS), Performance Evaluation (PEVA), Journal of Scheduling (JoS), Journal of Algorithms (JoA), Queueing Systems: Theory and Applications (QUESTA), Journal of Parallel and Distributed Computing (JPDC), Computer Networks (COMNET), Parallel Computing (PARCOMP), Applied Mathematics Letters, Operations Research Letters, Performance Evaluation Review (PER), ACM Sigmetrics, IFIP Performance, IEEE Infocom, QEST Conference, IEEE Mascots, ICST ValueTools Conference, IEEE International Parallel and Distributed Processing Symp (IPDPS), Conference on Decision and Control (CDC), The World-wide Web (WWW) Conference, ACM Hotmetrics, IEEE ITC, IEEE ICCCN, IEEE DSN, Wiley Encyclopedia of Operations Research and Management Science, Journal of Systems and Software, Internet Measurement Conference (IMC), IEEE Transactions on Automated Control (TAC), Probability in the Engineering and Informational Sciences (PEIS), Manufacturing and Service Operations management (MSOM).

Panel member for grant proposal review (each listed only once):

US National Science Foundation (NSF), Singapore National Research Foundation (NRF), Israel Science Foundation (ISF), Natural Sciences and Engineering Research Council of Canada (NSERC).

Professional Memberships:

ACM, IEEE, INFORMS

TEACHING EXPERIENCE

Courses taught at Caltech:

CMS/CS/EE 144 *Networks: Structure & Economics*

This course is targeted at juniors and seniors and focuses a variety of topics in network science, from theory to practice.

Online reviews for Winter 2018: 4.75/5, 97% response rate.

Online reviews for Winter 2018: 4.75/5, 86% response rate.

Online reviews for Winter 2017: 4.71/5, 87% response rate.

Online reviews for Winter 2016: 4.59/5, 89% response rate.

Online reviews for Winter 2015: 4.70/5, 59% response rate.

Online reviews for Winter 2014: 4.62/5, 82% response rate.

Online reviews for Winter 2013: 4.46/5, 98% response rate.

Online reviews for Winter 2012: 4.42/5, 76% response rate.

Online reviews for Winter 2011: 4.76/5, 74% response rate.

Online reviews for Winter 2010: 4.77/5, 70% response rate.

CS/EE 145 *Projects in Networking*

Students work in small groups to design and execute a project in the area of networking, broadly construed. The goal is for the project to either end with a deliverable (e.g. a working web application prototype) or a publishable conference paper. Projects from this course have yielded multiple conference submissions, a patent, and a startup being incorporated.

Online reviews for Spring 2018: 5.00/5, 43% response rate.

Online reviews for Spring 2017: 4.71/5, 31% response rate.

Online reviews for Spring 2015: 4.88/5, 12% response rate.

Online reviews for Spring 2014: 4.33/5, 21% response rate.

Online reviews for Spring 2013: 4.60/5, 21% response rate.
Online reviews for Spring 2012: 4.00/5, 35% response rate.
Online reviews for Spring 2011: 4.00/5, 44% response rate.
Online reviews for Spring 2010: 5.00/5, 38% response rate.

CS/EE 146 *Advanced Networking*
This is a topics course in networking, with changing focus from year to year.
Topics have included Sustainable computing (2011) and platform design (2016) when I have taught the course.
Online reviews for Spring 2016: 4.54/5, 25% response rate.
Online reviews for Spring 2011: 4.11/5, 79% response rate.

CS/EE 147 *Network performance evaluation*
Spring 2013, 2010, Winter 2009, Fall 2008
Course covers introductory stochastic modeling, scheduling theory, and queueing theory.
Online reviews for Spring 2013: 5.00/5, 60% response rate.
Online reviews for Spring 2010: 4.71/5, 47% response rate.
Online reviews for Winter 2009: 5.00/5, 86% response rate.
Online reviews for Fall 2008: 6.90/7, 69% response rate.

CS/SS 241 *Introduction to SISL, Topics in Algorithmic Game Theory*, co-taught with John Ledyard
Winter 2007
This topics course is jointly offered by CS and Economics. When I taught it in 2007,
it focused on Algorithmic Game Theory.
Combination of online and paper reviews: 6.70/7, 83% response rate.

Teaching awards:

Spring 2017 Caltech ASCIT Teaching Award
Spring 2010 Caltech ASCIT Teaching Award
Spring 2006 Carnegie Mellon Graduate Student Teaching Award.
Spring 2005 Alan J. Perlis School of Computer Science Student Teaching Award.
Spring 2005 Honorable Mention for the Carnegie Mellon Graduate Student Teaching Award.

ADVISING EXPERIENCE

Affiliated postdoctoral fellows:

Guannan Qu	2019-pres Received the Simoudis Discovery Prize in 2019
Yuanyuan Shi	2020-2021 Received a RSI Research award Joined UCSD as an Asst. Prof in 2021
Hongyao Ma	2020 Received ACM SigEcom dissertation award Joined Columbia as an Asst. Prof in 2020
Alessandro Zoca	2017-2019 Named Resnick Fellow in 2018. Received a Rubicon Grant in 2017. Joined CWI as an Asst. Prof in 2019.
Shai Vardi	2016-2018, supervised jointly with Federico Echenique Joined Purdue as an Asst. Professor in 2018.
Krishnamurthy Dvijotham	2015-2016, supervised jointly with Steven Low

	Joined PNNL in 2016.
Hu Fu	2015-2016, supervised jointly with Federico Echenique Joined UBC as an Asst. Professor in 2016.
Siddharth Barman	2012-2015, supervised jointly with Katrina Ligett and Federico Echenique Joined IIT, Bangalore as an Asst. Professor in 2015.
Umang Bhaskar	2012-2014, supervised jointly with Katrina Ligett and Federico Echenique Joined Tata Institute of Fundamental Research as an Asst. Professor in 2015.
Enrique Mallada	2013-2015, supervised jointly with Steven Low Joined Johns Hopkins University as an Asst. Professor in 2015.
Yakov Babichenko	2012-2014, supervised jointly with Katrina Ligett and Federico Echenique Joined the Technion as an Asst. Professor in 2014.
Yunjian Xu	2012-2013, supervised jointly with Steven Low and K. Mani Chandy Joined Singapore University of Technology and Design as an Asst. Professor in 2013.
Eilyan Bitar	2012-2013, supervised jointly with Steven Low Joined Cornell University as an Asst. Professor in 2013.
Sachin Adlakha	2010-2013, supervised jointly with Steven Low and K. Mani Chandy Joined Ayasdi, a data science startup, in 2013.
Krishna Jagannathan	2010-2011, supervised jointly with Eytan Modiano (MIT) Joined IIT Madras as an Asst. Professor in 2011.
Daniel Golovin	2009-2011, supervised jointly with Andreas Krause Joined Google in 2011.
Lijun Chen	2008-2011, supervised jointly with Steven Low Joined Colorado U. at Boulder as an Asst. Professor
Jason Marden	2007-2009, supervised jointly with John Ledyard Joined Colorado U. at Boulder as an Asst. Professor in 2009.
Lachlan Andrew	2007-2008, supervised jointly with Steven Low Joined Swinburne University as an ARC Future Fellow in 2008.

Graduate student advising:

Riley Murray	Co-advised with Venkat Chandrasekaran, entered in 2016. Received an NSF Graduate Fellowship
Yu Su	entered in 2015. Named a PIMCO Data Science Fellow in 2019.
Gautam Goel	Co-advised with Babak Hassibi, entered in 2015 Received an NSF Graduate Fellowship Named a Amazon AI Graduate Fellow in 2018.
Navid Azizan	Co-advised with Babak Hassibi, entered in 2015. Named a Amazon AI Graduate Fellow in 2017. Named a PIMCO Data Science Fellow in 2018. Joined MIT as an Asst. Prof. in 2021.
Palma London	entered in 2014, defended in 2020 Received an NSF Graduate Fellowship Named a Amazon AI Graduate Fellow in 2017. Joined Cornell as a postdoctoral scholar in 2020
Juba Ziani	Co-advised with Katrina Ligett, defended in 2020 Named a PIMCO Data Science Fellow in 2018. Received the Bhansali Dissertation Prize in 2019.
John Pang	Co-advised with Steven Low, entered in 2014, defended in 2019 Named an A-Star Fellow Received the Amorie Dissertation Prize in 2019.

Niangjun Chen	Joined Schlumberger as a postdoc in 2019. Entered in 2012, defended in 2018. Named an A-Star Fellow
Xiaoqi Ren	Joined the A-Star research institute, Singapore in 2018. Entered in 2012, defended in 2018. Named Caltech's "Outstanding TA" for Fall 2014. Named Renick Institute for Sustainability Graduate Research Fellow in Spring 2016. Received the Bhansali Dissertation Prize in 2018. Received the Demetriades - Tsafks -Kokkalis Prize in 2018. Joined Google in 2018.
Changhong Zhao	Co-advised with Steven Low, entered in 2011, defended in 2016. "Real-time load-side control of electric power systems." Named Qualcomm Innovation Fellowship Finalist in 2015. Received the Demetriades Prize in 2016. Joined NREL in 2016
Desmond Cai	C-oadvised with Mani Chandy and Steven Low, entered in 2010, defended in 2016. "Electricity Markets for the smart grid: Networks, timescales, and integration with control" Joined the A-Star research institute, Singapore in 2016.
Subhonmesh Bose	Co-advised with Steven Low, entered in 2009, defended in 2014. "An integrated design approach to power systems: From power flows to electricity markets." Received Atkinson Postdoctoral Fellowship in Sustainability at Cornell. Joined Cornell as a postdoctoral scholar and moved to UIUC as an Assistant Professor in 2015.
Zhenhua Liu	Co-advised with Steven Low, entered in 2009, defended in 2014. "Sustainable IT and IT for sustainability." Received an honorable mention for the SPEC Distinguished Dissertation Award. Joined LBNL as a postdoctoral scholar and moved to Stony Brook as an Asst. Professor in 2015.
Minghong Lin	Entered in 2008, defended in 2013. "Algorithmic challenges in green data centers." Received an IBM Graduate Fellowship and was named a finalist for the Facebook Fellowship. Joined Facebook as a Research Scientist in 2013.
Ragavendran Gopalakrishnan	Entered in 2008, defended in 2013. "Characterizing distribution rules for cost sharing games." Joined Colorado U at Boulder as a postdoctoral scholar and then joined Xerox Research in 2015.
Elizabeth Bodine-Baron	Co-advised with Babak Hassibi, entered in 2007, defended in 2012. "Peer effects in social networks: Search, matching markets, and epidemics." Joined RAND as an Associate Engineer in 2013.
Jayakrishnan Nair	Co-advised with Steven Low, entered in 2007, defended in 2012. "Scheduling for heavy-tailed and light-tailed workloads in queueing systems." Joined CWI as a postdoctoral scholar and then moved to IIT Bombay as an Asst. Professor in 2014.

Graduate student qualification/thesis/candidacy committees:

Utkan Candogan	2019 Caltech, dissertation committee
Grant van Horn	2018 Caltech, dissertation committee
Hoang Le	2018, Caltech, candidacy committee
Zhixuan Fang	2018, Tsinghua, dissertation committee
Milan Cvitkovic	2018, Caltech, candidacy committee
Grant Van Horn	2018, Caltech, candidacy committee
Oguzhan Teke	2018, Caltech, candidacy committee
Linqi Guo	2018, Caltech, candidacy committee
John Bruer	2017, Caltech, dissertation committee
Yujie Tang	2017, Caltech, candidacy committee

Utkan Candogan	2017, Caltech, candidacy committee
Rachel Cummings	2017, Caltech, dissertation committee
Zhang Ying	2017, CUHK, dissertation committee
Linqi Guo	2017, Caltech, candidacy committee
Sumanth Dathathri	2016, Caltech, dissertation committee
Christos Thrampoulidis	2016, Caltech, dissertation committee
Juba Ziani	2016, Caltech, candidacy committee
Yuh Shyang Wang	2016, Caltech dissertation committee
Xiaoqi Yin	2016, CMU, candidacy and dissertation committee
Changhong Zhao	2016, Caltech, dissertation committee
Nikolai Matni	2015, Caltech, dissertation committee
Masoud Farivar	2015, Caltech, dissertation committee
Rachel Cummings	2015, Caltech, candidacy exam
Yuh-Shyang Wang	2015, Caltech, candidacy exam
Wei Mao	2015, Caltech, dissertation committee
Lingwen Gan	2014, Caltech, dissertation committee
Changhong Zhao	2014, Caltech, candidacy exam
Sean Keller	2013, Caltech, dissertation committee
Micheal Olsen	2013, Caltech, dissertation committee
Annie Liu	2013, Caltech, dissertation committee
Lingwen Gan	2013, Caltech, candidacy exam
David Aikema	2013, University of Calgary, external examiner
Mathieu Feuillet	2012, INRIA Paris-Rocquencourt, dissertation reviewer
Michael Olson	2012, Caltech, candidacy exam
Mayank Bakshi	2011, Caltech, dissertation committee
Sormeh Shadbakht	2011, Caltech, dissertation committee
Annie Liu	2011, Caltech, candidacy exam
Smruti Padhy	2011, IIT, Delhi dissertation reviewer
Sean Keller	2010, Caltech, candidacy exam
Dave Buchfuhrer	2010, Caltech, candidacy exam and dissertation committee
Longbo Huang	2010, USC, dissertation committee
Mahyar Salek	2009, USC, candidacy exam
Daniel Wilhelm	2008, Caltech, candidacy exam

Undergraduate research advising (outside of courses):

Jannie Yu	2020 SURF & Independent Study
Vivek Anand	2020 SURF & Independent Study
Chenkai Yu	2020 SURF & Independent Study
Weici Pan	2020 SURF & Independent Study
Johanna KarraS	2019-2020 Independent Study
Yongkyun Lee	2019-2020 Independent Study
Xiaotian Zhang	2019-2020 Independent Study
John Wang	2019-2020 Independent Study
Haoyuan Sun	2019 2020 Independent study
Yiheng Lin	2019 SURF & Independent study
Eric Zhao	2018 Independent study Won the 2019 Meeting of the Minds Best Poster award
Erich Liang	2018 & 2019 Independent study Won the 2019 Meeting of the Minds Best Poster award
Siddharth Prasad	2018 Independent study
Fransesco Macagno	2017-2018 Independent study

	Won the 2018 Smart Campus Innovation Challenge
Jack Kleeman	2017 Summer Undergraduate Research
Catherine Jamshidi	2015-2016 Independent study
	Received the Hinrichs Memorial Award
Joseph Choi	2014-2015 Independent study
Katie Knister	2013-2014 Independent study
Iris Liu	2013-2014 Independent study
	Received the Bhansali Prize for Undergraduate Research in Computer Science
Ben Razon	2012-2013 Independent study
Yizhen Wang	2012 Summer Undergraduate Research
Michael Hirshleifer	2012 Summer Undergraduate Research
Michael Wu	2010 Summer Undergraduate Research
Yuehua (Fred) Zhao	2010 Summer Undergraduate Research
Christina Lee	2010 Summer Undergraduate Research
	Joined Cornell as an Assistant Professor in 2018.
Sherwin Doroudi	2009-2010 Independent study
	Joined Minnesota as an Assistant Professor in 2017.
Matthew Maurer	2009-2010 Independent study
Anthony Chong	2009-2010 Senior thesis
Sherwin Doroudi	2008 Summer Undergraduate Research
	Received a Rose Hills Foundation Fellowship
Benjamin Flora	2008 SURF student
Matthew Maurer	2008 SURF student
Gwendolyn Stockman	Senior honors thesis at CMU in 2005-2006.

CONTRACT AND GRANT SUPPORT

Grant support:

2016 – 2020	NSF AitF 1637598 AitF: Algorithmic challenges in smart grids: control optimization & learning <i>Steven Low (PI), Adam Wierman (co-PI), Yisong Yue (co-PI), and Venkat Chandrasekaran (co-PI)</i>
2016 – 2019	ARPA-E NODES NODES: Real-time Optimization and Control of Next-Generation Distribution Infrastructure <i>Emiliano Dall’Anese, Brian Johnson, Blake Lundstrom, Benjamin Kroposki, Steven Low, John Doyle, Adam Wierman, Sairaj Dhople, Na Li, Antranik Paylan, Robert Sherick</i>
2015 – 2020	NSF CNS–1518941 NETS: Large: Networked Markets: Theory and Applications <i>Adam Wierman (PI), Federico Echenique (Co-PI), John Ledyard (Co-PI), Matthew Elliott (Co-PI), Katrina Ligett (Co-PI)</i>
2015 – 2018	NSF CPS–1545096 CPS: Synergy: Beyond Stability: Performance, Efficiency and Disturbance Management for Smart Infrastructure Systems <i>Adam Wierman (PI), Steven Low (co-PI), Dennice Gayme (PI), Ao Tang (PI), Vijay Gupta (PI)</i>
2013 – 2016	NSF EPAS–1307794 A unified approach to quantifying market power in the future grid <i>Adam Wierman (PI), Hamed Mohsenian-Rad (PI)</i>
2013 – 2016	NSF CNS–1319820 CSR: Collaborative Research: Data center demand response: Coordinating the cloud and the smart grid <i>Adam Wierman (PI), Steven Low (co-PI), Hamed Mohsenian-Rad (PI)</i>
2011 – 2014	NSF CCF-1101470

2009 – 2014 ICES: A revealed preference approach to computational complexity in economics
Adam Wierman (PI), Federico Echienique (co-PI)
 NSF CNS-0846025
 CAREER: Towards a rigorous foundation for scheduling in modern systems
Adam Wierman (PI)

2008 – 2011 NSF CCF-0830511
 Bridging probabilistic and competitive analysis of scheduling policies
Adam Wierman (PI)

External collaborator on international grant:

2013 – 2015 Netherlands: NWO 600.065.130.12N242
 Bridging probabilistic and competitive analysis of scheduling policies

2013 – 2015 Australia: ARC DP130101378
 Resource management algorithms and software systems for green cloud computing

Studentinternedin2012.

Community Interactions:

Math Academy Board Member of Math Academy, an organization provides accelerated Mathematics curriculum for advanced middle schooler students.

PUSD Consultant for the school district working to redesign open enrollment and transportation.

PEN Board member for Parent Education Network for public schools in Pasadena.

STEAM Coders Arranged summer programs at Caltech for elementary and middle school students from under-represented groups.

Math Circles Teach weekly math circle class to local elementary students in grades 3-5

INSTITUTE SERVICE

2019-pres RSI Sunlight to Everything Advisory Board

2018 Led the creation of the Information and Data Science (IDS) undergraduate major and minor

2018-pres Member of the Faculty Board

2018-pres Member of the Core Curriculum Steering Committee

2018-pres Member of the Faculty Board Steering Committee

2016-pres Director of Information Science and Technology (IST) initiative

2016 Founded the CMS Partners Program

2016-2017 Member of student/faculty conference committee for CS

2015-2020 Executive officer of CMS

2015 EAS Division chair search committee

2013-pres Member of Linde Institute Board

2013-2019 Co-director of SISL

2014-2015 CMS graduate option representative

2014-2015 Member of student/faculty conference committee for CS

2014 Led the creation of new CMS PhD option

2013-2014 EE faculty hiring committee

2013 Led the creation of the CS minor

2012-2013 Member of student/faculty conference committee for CS

2012-2013 CMS faculty hiring committee

May 2012 Created new CS minor

2012 Led an initiative to increase diversity in the CS major

2010-2011 Member of student/faculty conference committee for CS

2010-2011	CMS faculty hiring committee
2010-2015	CS undergraduate option representative
2008-pres	Co-director of the Rigorous System Design Research Group (RSRG)
2007-2013	IST Lunch Bunch co-organizer
2007-2011	CS/EC Hiring committee
2003-2006	Founded and organized the Random Distance Run at CMU
2003-2006	Member of the CMU Computer Science Department Speakers Club

Complete list of publications by **Adam Wierman**

Electronic copies of all listed publications are available on my web page. My web page also includes this list of publications indexed by year, topic, coauthor, and venue.

Books

- [—] Jayakrishnan Nair, Adam Wierman, and Bert Zwart. “The Fundamentals of Heavy-Tails: Properties, Emergence, and Estimation.” Forthcoming.

Thesis

- [07] Adam Wierman. “Scheduling for today’s computer systems: Bridging theory and practice.” Ph.D. Thesis. Carnegie Mellon University, Pittsburgh, PA. May 2007. CMU-CS-07-126. **Co-recipient of the Carnegie Mellon School of Computer Science Distinguished Dissertation Award. Finalist receiving Honorable Mention for the INFORMS Doctoral Dissertation Award for Operations Research in Telecommunications.**

Refereed Journal and Conference Publications

- [—] J Pang, W Lin, H Fu, J Kleeman, E Bitar, A Wierman. “Transparency and Control in Platforms for Networked Markets.”
- [—] J Pang, W Lin, H Fu, J Kleeman, E Bitar, A Wierman. “Transparency and Control in Platforms for Networked Markets.”
- [—] G Qu, C Yu, S Low, A Wierman. “Combining Model-Based and Model-Free Methods for Nonlinear Control: A Provably Convergent Policy Gradient Approach.”
- [—] C Yu, G Shi, SJ Chung, Y Yue, A Wierman. “Competitive Control with Delayed Imperfect Information.”
- [—] L Guo, C Liang, A Zocca, SH Low, A Wierman. “Localization Mitigation of Cascading Failures in Power Systems, Part I: Spectral Representation Tree Partition.”
- [—] L Guo, C Liang, A Zocca, SH Low, A Wierman. “Localization Mitigation of Cascading Failures in Power Systems, Part II: Localization.”
- [—] R Murray, V Chandrasekaran, A Wierman. “Newton polytopes and relative entropy optimization.”
- [21] B Sun, A Zeynali, T Li, M Hajiesmaili, A Wierman, DHK Tsang. “Competitive Algorithms for the Online Multiple Knapsack Problem with Application to Electric Vehicle Charging.” Sigmetrics 2021.
- [20] Riley Murray, Venkat Chandrasekaran, Adam Wierman. “Signomial and polynomial optimization via relative entropy and partial dualization.” Mathematical Programming Computation, 1-39.
- [20] G Qu, A Wierman, N Li. “Scalable reinforcement learning of localized policies for multi-agent networked systems.” Learning for Dynamics and Control, 2020. (top 10)
- [20] C Yu, G Shi, SJ Chung, Y Yue, A Wierman. “The Power of Predictions in Online Control.” NeurIPS 2020.
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- [15] Xiaoqi Ren, Ganesh Ananthanarayanan, Adam Wierman and Minlan Yu. “Speculation-aware Cluster Scheduling at Scale.” To appear in *Performance Evaluation Review*. An earlier version appeared at the *MAMA workshop at Sigmetrics 2015*.
- [15] Niangjun Chen, Xiaoqi Ren, Shaolei Ren, and Adam Wierman. “Greening multi-tenant data center demand response.” To appear in *Performance Evaluation Review*. An earlier version appeared at the *MAMA workshop at Sigmetrics 2015*.
- [14] Mahdi Ghamkhari, Hamed Mohsenian-Rad, and Adam Wierman. “Optimal power procurement for data centers in day-ahead and real-time electricity markets.” *IEEE INFOCOM Workshop on Smart Data Pricing, 2014*.
- [13] Minghong Lin, Jian Tan, Adam Wierman, and Li Zhang. “Joint optimization of overlapping phases in MapReduce.” To appear in *Performance Evaluation Review*. An earlier version appeared at the *MAMA workshop at Sigmetrics 2013*.
- [12] Minghong Lin, Adam Wierman, Alan Roytman, Adam Meyerson, and Lachlan L.H. Andrew. “Online optimization with switching costs.” To appear in *Performance Evaluation Review*. An earlier version appeared at the *MAMA workshop at Sigmetrics 2012*.
- [12] Jayakrishnan Nair, Sachin Adlakha, and Adam Wierman. “Inventory management in the presence of renewable energy.” Proceedings of MSOM, 2012.
- [11] Sherwin Doroudi, Ragavendran Gopalakrishnan, and Adam Wierman. “Dispatching to incentivize fast service in multi-server queues.” To appear in *Performance Evaluation Review*. An earlier version appeared at the *MAMA workshop at Sigmetrics 2011*.
- [10] Minghong Lin, Adam Wierman, and Bert Zwart. “The average response time in a heavy-traffic SRPT queue.” *Performance Evaluation Review* (2010) 38:2, 12-14. An earlier version appeared at the *MAMA workshop at Sigmetrics 2010*.
- [09] Lachlan Andrew, Adam Wierman, and Ao Tang. “Optimal speed scaling under arbitrary power functions.” *Performance Evaluation Review* (2009) 37:2, 39-41. An earlier version appeared at the *MAMA workshop at Sigmetrics 2009*.
- [08] Ho-Lin Chen, Jason Marden, and Adam Wierman. “The effect of local scheduling in load balancing designs.” *Performance Evaluation Review*. 36:2, 110-112. An earlier version appeared at the *MAMA workshop at Sigmetrics 2008*.
- [06] Adam Wierman. “On the effect of inexact size information in size based policies.” *Performance Evaluation Review*. 34:3, 21-23. An earlier version appeared in the *MAMA workshop at Sigmetrics 2006*.
- [04] Takayuki Osogami, Adam Wierman, Mor Harchol-Balter, and Alan Scheller-Wolf. “A recursive analysis technique for multi-dimensionally infinite Markov chains.” *Performance Evaluation Review*. (2004) 32:2, 3-5. An earlier version appeared in the *MAMA workshop at Sigmetrics 2004*.

- [04] Adam Wierman and Mor Harchol-Balter. “Formalizing SMART scheduling.” *Performance Evaluation Review* (2004) 32:2, 12-13. An earlier version appeared in the *MAMA workshop at Sigmetrics 2004*.
- [03] Adam Wierman, Takayuki Osogami, and Jörgen Olsén. “Modeling TCP-Vegas under on/off traffic.” *Performance Evaluation Review* (2003) 31:2, 6-8. An earlier version appeared in the *MAMA workshop at Sigmetrics 2003*.
- [02] Mor Harchol-Balter, Karl Sigman, and Adam Wierman. “Understanding the slowdown of large jobs.” *Performance Evaluation Review* (2002) 30:3, 9-11. An earlier version appeared in the *MAMA workshop at Sigmetrics 2002*.

Chapters in Books

- [12] Adam Wierman, Lachlan L. H. Andrew, and Minghong Lin. “Speed scaling: An algorithmic perspective.” Sanjay Ranka and Ishfaq Ahmad. *Handbook of Energy-Aware and Green Computing*. CRC Press, to appear.
- [08] Jack Mostow, Gregory S. Aist, Cathy Huang, Brian Junker, Rebecca Kennedy, Hua Lan, DeWitt Latimer IV, Rollanda O’Connor, Regina Tassone, and Adam Wierman. “4-Month evaluation of a learner-controlled reading tutor that listens.” Melissa Holland and F. Pete Fisher (Editors), *The path of speech technologies in computer-assisted language learning*. Routledge, 2008.

Unrefereed Letters

- [13] Subhonmesh Bose, Chenye Wu, Adam Wierman, and Hamed Mohsenian-Rad. “The need for new measures to assess market power in deregulated electricity markets.” *IEEE Smart Grid Newsletter* 2013.
- [11] Lachlan L. H. Andrew, Minghong Lin, Zhenhua Liu, and Adam Wierman. “Algorithms for Dynamic Capacity Provisioning.” *Proceedings of Conf. on Optical Internet (COIN)* 2012.
- [11] Federico Echenique, Daniel Golovin, and Adam Wierman. “Complexity and economics: computational constraints may not matter.” *ACM SigEcom Exchanges* (2011) 10:1, 2-5.
- [10] Lachlan L.H. Andrew, Minghong Lin, Ao Tang, and Adam Wierman. Speed Scaling to Trade-off Efficiency, Simplicity, Robustness and Fairness. *IEEE COMSOC Multimedia Communications Technical Committee E-Letter* (2010) 5:4, 32-36.

Technical Reports which do not overlap with above lists

- [03] Adam Wierman and Mor Harchol-Balter. “Bounds on a fair policy with near optimal performance.” *Carnegie Mellon School of Computer Science Technical Report CMU-CS-03-198*.
- [02] Adam Wierman and Nikhil Bansal. “Competitive analysis of M/GI/1 queueing policies” *Carnegie Mellon School of Computer Science Technical Report CMU-CS-02-201*.

Selected invited talks by Adam Wierman

Keynotes and distinguished lectures

- June 2019 Online optimization and Energy
Keynote for ACM e-Energy
- June 2019 Platforms and Networked Markets
Plenary at Marketplace Innovation Workshop 2019
- June 2019 Platforms and Networked Markets
Plenary at Marketplace Innovation Workshop 2019
- May 2018 Transparency and Control in Platforms and Networked Markets
MobiHoc Frontiers of Networks Keynote
- May 2018 Transparency and Control in Platforms and Networked Markets
IMaCCS Keynote
- July 2017 Caltech Computes: Disrupting Science and Engineering with Computational Thinking
Caltech Bay Area Alumni Luncheon
- Apr 2017 How Clean is the Cloud
Caltech Watson Lecture
- Dec 2016 How Clean is the Cloud
The Caltech Associates
- Nov 2016 Caltech Computes: Disrupting Science and Engineering with Computational Thinking
Caltech Alumni College
- Aug 2016 Online Scheduling meets Queueing
The Simons Institute
- Aug 2016 Energy and Uncertainty
The Simons Institute
- Apr 2016 Data Centers and Energy: Did we get it backwards?
Texas A&M Leaders & Innovators Series
- Feb 2016 Data Centers and Energy: Did we get it backwards?
Keynote talk at UIUC CSL Student Conference
- Dec 2015 Networked Markets: Intermediaries and Market Power
UCLA EE Distinguished Seminar
- Apr 2015 Data Centers, Energy, and Optimization
Northwestern Industrial Engineering Distinguished Lecture
- Feb 2015 Data Centers, Energy, and Optimization
Boston University CISE Distinguished Lecture
- July 2014 Data centers and Energy: Have we gotten it backwards?
Microsoft Faculty Summit
- Oct 2013 Algorithmic challenges for sustainable data centers
UCSD CS Distinguished Lecture
- Sept 2013 Algorithmic challenges for sustainable data centers
Princeton ORFE Distinguished Lecture
- June 2013 Heavy-tails: Properties, Emergence, and Identification
Tutorial at ACM Sigmetrics
- June 2013 Congestion and price competition in the cloud
Keynote talk at ACM WPIN+NetEcon
- May 2012 Algorithmic challenges for greening data centers
Keynote talk at the Imperial College Energy-Performance colloquium
- May 2012 Energy procurement in the presence of intermittent sources
Keynote talk at the Imperial College Energy-Performance colloquium
- May 2012 Algorithmic challenges in sustainable data centers
Keynote talk at the STOC workshop on Computational Sustainability

- June 2011 Algorithmic challenges for greening IT
Keynote talk at ACM Sigmetrics conference
- Sept 2009 Scheduling to balance energy and delay.
Columbia IEOR Distinguished Lecture
- Sept 2008 Does helping the little guy help everyone?
Carnegie Mellon CS Distinguished Lecture
- Aug 2008 Does helping the little guy help everyone?
Mini-course at the Adv. Network Sci. Lecture Series at UCSD

Invited conference talks and departmental seminars

- Oct 2020 Competitive Control via Online Optimization
Stanford
- Oct 2020 Online optimization & energy
Princeton
- Oct 2020 Competitive Control via Online Optimization
Columbia
- Oct 2020 Competitive Control via Online Optimization
Michigan
- Oct 2020 Online optimization & energy
PIMCO
- Oct 2019 Online optimization & energy
Cornell
- Oct 2019 Online optimization & energy
Allerton
- April 2019 Platforms and Networked Markets
UC Irvine
- Sept 2018 Platforms and Networked Markets
Stanford
- Aug 2018 Transparency and Control in Platforms and Networked Markets
Tsinghua
- May 2018 Transparency and Control in Platforms and Networked Markets
UC Irvine
- Dec 2017 Transparency and Control in Platforms and Networked Markets
Stanford
- Oct 2017 Networked cournot competition in platform markets
Allerton
- May 2017 Platforms and Networked Markets
Purdue
- Apr 2017 Platforms and Networked Markets
USC
- Apr 2017 Platforms and Networked Markets
Chicago Booth
- Feb 2017 The Power of Predictions in Online Optimization
Georgia Tech, ISYE
- Nov 2016 The Power of Predictions in Online Optimization
The Simons institute
- July 2016 Data Markets in the Cloud: Pricing, Privacy, and Versioning
Microsoft Faculty Summit
- May 2016 Data Centers and Energy: Did we get it backwards?
University of Minnesota DTC Seminar series
- Dec 2015 Data Centers and Energy

- Berkeley AMPLab Seminar*
- Nov 2015 Data Centers, Energy, and Online Optimization
Invited talk at Johns Hopkins
- Nov 2015 On the Efficiency of Networked Stackelberg Competition
Invited talk at INFORMS General Meeting
- June 2015 Data Centers and Energy: Did we get it backwards?
Invited talk NSF Sustainable Data Center Workshop
- May 2015 Data Centers, Energy, and Optimization
Stanford GSB / MSE
- Jan 2015 Data Centers, Energy, and Optimization
Princeton CS Colloquium
- Nov 2014 Online Convex Optimization with Predictions
Invited talk at the INFORMS general meeting
- Oct 2014 Data Center Demand Response: Opportunities and Challenges
Invited talk at the IEEE Green Computing Conference
- Sept 2014 Data Centers and Energy: Did we get it backwards?
Invited talk at the DIMACS Data Aware Energy Usage meeting
- June 2014 Electricity markets and renewable energy
Invited talk at the Stochastic Networks Conference
- April 2014 Algorithmic challenges in sustainable data centers
Invited talk at NYU Stern IOMS Department, Host: Ilan Lobel
- Feb 2014 The empirical implications of complexity for economics
Invited keynote at IMSE Workshop, Host: Bruce Hajek and Yuliy Baryshnikov
- Dec 2013 Algorithmic challenges in sustainable data centers
Invited talk at Ohio State, Host: Chris Stewart
- Nov 2013 Algorithmic challenges in sustainable data centers
Invited talk at McGill, Host: Xue Liu
- Oct 2013 An empirical perspective on the computational complexity of economic models
Invited talk at INFORMS General Meeting, Auctions section
- Apr 2013 Congestion and price competition in the cloud
Invited talk at NSF IGERT at Wayne State
- Feb 2013 Congestion and price competition in the cloud
Invited talk at Banff workshop on Large-scale networks
- Nov 2012 Energy procurement in the presence of intermittent sources
Invited talk at Univ. of Waterloo, Hosts: Catherine Rosenberg and S. Keshav
- Nov 2012 Algorithmic challenges in sustainable data centers
Invited talk at Univ. of Toronto, Host: Bianca Schroeder
- Nov 2012 Algorithmic challenges in sustainable data centers
Invited talk at McMaster, Host: Doug Down
- Nov 2012 Algorithmic challenges in sustainable data centers
Invited talk at USC, Host: Minlan Yu
- Oct 2012 Energy procurement in the presence of intermittent sources
Invited talk at INFORMS
- Oct 2012 Smoothed online convex optimization
Invited talk at INFORMS
- Sept 2012 Energy procurement in the presence of intermittent sources
Invited talk at the "Stochastic Activities Month" at EURANDOM
- Sept 2012 Congestion and price competition in the cloud
Invited talk at the "Stochastic Activities Month" at EURANDOM
- Aug 2012 Algorithmic challenges in sustainable data centers
Invited talk at Univ. of Colorado at Boulder, Host: Jason Marden
- July 2012 Algorithmic challenges in sustainable data centers

Invited talk at IBM Research, Host: Li Zhang
 June 2012 Algorithmic challenges in sustainable data centers
Invited talk at the Stochastic Networks Conference
 Mar 2012 Dynamic capacity provisioning in data centers
Invited talk at Texas A&M, Host: Srinivas Shakkottai
 Feb 2012 Dynamic capacity provisioning in data centers
Invited talk at ITA, Host: Sujay Sanghavi
 Dec 2011 Algorithmic challenges for greening IT
Invited talk at CMU, Host: Mor Hachol-Balter
 Nov 2011 Algorithmic challenges for greening IT
Invited talk at Berkeley, Host: Rhonda Righter
 Nov 2011 Algorithmic challenges for greening IT
Invited talk at UT Austin, Host: Sujay Sanghavi and Sanjay Shakkottai
 Sept 2011 Online dynamic capacity provisioning in data centers
Invited talk at the Allerton Conference, Host: Yi Lu
 July 2011 Speed scaling: Optimality vs. robustness
Invited talk at INFORMS Applied Probability Conference
 May 2011 A revealed preference view of computation for economics.
Invited talk at MSR New England, Host: Ishai Menache
 May 2011 A revealed preference view of computation for economics.
Invited talk at MIT, Host: Devavrat Shah
 Mar 2011 A revealed preference view of computation for economics.
Invited talk at Univ. of Colorado at Boulder, Host: Jason Marden
 Feb 2011 Scheduling to balance energy and delay.
Invited talk at UC Riverside, Host: Victor Zordan
 Nov 2010 A revealed preference view of computation for economics.
Invited talk at Basque Center for Applied Mathematics, Host: Urtzi Ayesta
 Nov 2010 Scheduling to balance energy and delay.
Invited talk at Basque Center for Applied Mathematics, Host: Urtzi Ayesta
 Nov 2010 A revealed preference view of computation for economics.
Invited talk at Social NEGT
 Sept 2010 Scheduling for the tail: Robustness versus Optimality.
Invited talk at Allerton, Host: R. Srikant and Bruce Hajek
 Aug 2010 Algorithmic issues for green data centers.
Invited talk at NSF Workshop on the Science of Power Management.
 June 2010 Scheduling to balance energy and delay.
Invited talk at Cambridge University Newton Institute
 Dec 2009 Scheduling to balance energy and delay.
Invited talk at Tokyo Institute of Technology, Host: T. Osogami and H. Takagi
 Nov 2009 Scheduling to balance energy and delay.
Invited talk at EURANDOM, Host: Onno Boxma
 Nov 2009 Scheduling to balance energy and delay.
Invited talk at Stanford, Host: Tim Roughgarden and Ramesh Johari
 Oct 2009 Overcoming limitations of game theoretic control.
Invited talk at INFORMS annual meeting, Applied Probability section
 Oct 2009 Understanding fairness using a queueing game.
Invited talk at INFORMS annual meeting, Applied Probability section
 Oct 2009 Speed scaling for power management.
Invited talk at INFORMS annual meeting, Applied Probability section
 Oct 2009 Scheduling to balance energy and delay.
Invited talk at UCLA, Host: Mihaela van der Schaar
 Sept 2009 Scheduling to balance energy and delay.

- July 2009 *Invited talk at UCSD, Host: Ruth Williams & Tara Javidi*
Scheduling to balance energy and delay.
- July 2009 *Invited talk at Cornell, Host: Kevin Tang*
Stochastic analysis of power-aware speed scaling.
- June 2009 *Invited talk at INFORMS Applied Probability meeting*
Scheduling to balance energy and delay.
- May 2009 *Invited talk at USC, Host: Rahul Jain*
Power management via speed scaling.
- Mar 2009 *Invited talk at Lee Center Workshop*
The impact of back-end scheduling in load balancing games.
- Oct 2008 *Invited talk at Yahoo Research workshop*
Scheduling despite inexact job size information
- Oct 2008 *Invited talk at INFORMS annual meeting, Telecommunications section*
The effect of local scheduling in load balancing designs
- Sept 2008 *Invited talk at INFORMS annual meeting, Applied Probability section*
Stochastic analysis of power-aware scheduling
- June 2008 *Invited talk at the Allerton Conference, Host: Bruce Hajek and R. Srikant*
"Non-cooperative cooperation."
- June 2008 *ACM Hotmetrics Work in Progress session*
"Scheduling despite inexact job-size information."
- May 2008 *ACM Sigmetrics*
"The effect of local scheduling in load balancing designs."
- Apr 2008 *ACM MAMA workshop at Sigmetrics*
"Practical Theory."
- Mar 2008 *Invited talk at Microsoft Research, Host: Harold Javid*
"Scheduling for today's systems."
- Jan 2008 *Invited talk at INFORMS Telecommunication Conference, Dissertation Award Finalist Session*
"Modern scheduling issues."
- Sept 2007 *Invited talk at IBM Research Watson, Host: Cathy Xia and Mark Squillante*
"Revisiting the performance of large jobs in the M/GI/1 queue."
- July 2007 *Invited talk at the Allerton Conference, Host: Bruce Hajek and R. Srikant*
"Revisiting the performance of large jobs in the M/GI/1 queue."
- July 2007 *Invited talk at INFORMS Applied Probability conference*
"Scheduling in polling systems."
- Mar 2007 *Invited talk at INFORMS Applied Probability conference*
"Fairness in queues."
- Feb 2007 *Invited talk at CMU, Host: Mor Harchol-Balter*
"Scheduling for today's computer systems."
- Dec 2006 *Invited talk at NYU, Host: Michael Pinedo*
"Levels of information: How much do policies need to know about job sizes?"
- Nov 2006 *Invited talk at CWI, the Netherlands, Host: Rudesindo Nunez Queija*
"Characterizing the effect of inexact size information in size based policies."
- Nov 2006 *Invited talk at INFORMS joint conference*
"A class of policies that prioritize small jobs."
- Oct 2006 *Invited talk at University of Twente, the Netherlands, Host: Richard Boucherie*
"Fairness in queues."
- Sept 2006 *Invited talk at EURANDOM Institute, the Netherlands, Host: Onno Boxma*
"A class of policies that prioritize small jobs."
- May 2006 *Invited talk at TU/e, the Netherlands, Host: Ivo Adan*
"Classifying policies that prioritize small jobs."
- Dec 2005 *Invited talk at Stanford University, Hosts: Peter Glynn and Balaji Prabhakar*
"Understanding the impact of SMART scheduling."

- Nov 2005 *Invited talk at Columbia University, Host: Ward Whitt*
 “Understanding the effects of SMART scheduling.”
- July 2005 *Invited talk at INFORMS joint conference*
 “Classifying scheduling policies with respect to moments of conditional response time.”
- July 2005 *Invited talk at the CMU & TU/e Collaborative Workshop*
 “Classifying scheduling policies with respect to fairness and predictability.”
- July 2004 *Invited talk at INFORMS Applied Probability conference*
 “Formalizing SMART scheduling.”
- July 2004 *Invited talk at EURANDOM Workshop on quantitative models for production and communication networks*
- May 2004 “Scheduling web servers: Theory and practice.”
Invited talk at University of Calgary, Host: Carey Williamson
- May 2004 “Achieving low mean response times while providing fairness.”
Invited talk at CORS/INFORMS joint conference
- Oct 2003 “Prioritization in multiserver queues.”
Invited talk at INFORMS joint conference