

ADAM C. WIERMAN

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Computer Science
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RESEARCH OVERVIEW

"Better design through modeling and measurement"

My research focuses on using mathematical models to provide insight into the design of computer systems. I apply analytic models and tools that are traditionally used in the operations research community in order to evaluate the impact of design decisions in systems such as web servers, server farms, routers, databases, and beyond. My work applies and often extends techniques in stochastic modeling, queueing theory, scheduling theory, and game theory.

RESEARCH INTERESTS

Performance evaluation of computer systems; Scheduling and resource allocation; Queueing theory; Networking; Power management; Load balancing; Server farms; Game theory; Network games; Social Networks.

EMPLOYMENT

2007-pres	Assistant Professor of Computer Science California Institute of Technology
July-Dec 2006	Visiting Researcher EURANDOM Institute Hosted by: Ivo Adan and Onno Boxma

EDUCATION

2007	Ph.D. in Computer Science Carnegie Mellon University, Pittsburgh, PA <i>Advised by Mor Harchol-Balter, Associate Professor.</i> <i>Thesis committee: Mor Harchol-Balter, John Lafferty, Bruce Maggs, Alan Scheller-Wolf, and Ward Whitt.</i>
2004	Masters of Science in Computer Science Carnegie Mellon University, Pittsburgh, PA <i>Advised by Mor Harchol-Balter, Associate Professor</i>
2001	B.S. in Computer Science with an additional major in Mathematics, and minors in Psychology and Statistics Carnegie Mellon University, Pittsburgh, PA <i>Advised by Mark Stehlik, Assistant Dean for Undergraduate Education</i>

HONORS

- 2009 Awarded NSF CAREER grant
- 2008 Winner of Okawa Foundation research grant competition
- 2008 Finalist for the Microsoft New Faculty Fellowship
- 2008 Finalist receiving Honorable Mention for the INFORMS Doctoral Dissertation Award for Operations Research in Telecommunications
- 2008 Co-recipient of the CMU School of Computer Science Distinguished Dissertation Award
- 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 ACM Sigmetrics Best Student Paper Award recipient
- 2003 ACM Sigmetrics Student Travel Grant recipient
- 2003-2006 National Science Foundation Graduate Fellowship recipient
- 2003-2006 Selected for the CMU SCS Speakers Club
- 2001-2007 Graduate Fellowship at Carnegie Mellon University
- 2001 Graduated CMU with University and College Honors, and a 4.0/4.0 GPA
- 2000 Inducted into Phi Kappa Phi
- 2000 Inducted into Phi Beta Kappa
- 2000 Selected for the NSF Random Structures REU summer program
- 1999 Inducted into the National Society of Collegiate Scholars
- 1999-2002 Cross Country and Track Varsity Co-captain
- 1997-2002 Cross Country and Track UAA All-conference Academic team

PUBLICATIONS

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.**

Papers Under Preparation

- [09] Misja Nuyens and Adam Wierman. "Moment conditions for the foreground-background queue."
- [09] Adam Wierman "Asymptotic cumulants of scheduling policies."
- [09] Adam Wierman and Bert Zwart. "Competitive scheduling and large deviations."
- [09] Elizabeth Bodine, Babak Hassibi, Adam Wierman. "Generalized Kronecker graphs."
- [09] Minghong Lin, Adam Wierman, and Bert Zwart. "The heavy-traffic growth rate of Shortest Remaining Processing Time."

- [09] Lachlan Andrew, Adam Wierman, and Ao Tang. “The interaction of scheduling and speed scaling.”

Papers Under Submission

- [09] A.A.A. Kock, L.F.P. Etman, J.E. Rooda, L.J.B.F. Adan, M. van Vuuren, and Adam Wierman. “Aggregate modeling of multi-processing workstations.”
- [09] Chang Woo Yang, Adam Wierman, Sanjay Shakkottai, and Mor Harchol-Balter. “Many flows asymptotics for SMART scheduling policies.”
- [09] Bianca Schroeder, Mor Harchol-Balter, Arun Iyengar, Erich Nahum and Adam Wierman. “Providing QoS using external scheduling.”
- [09] Jason Marden and Adam Wierman. “Distributed welfare games.”
- [09] Jason Marden and Adam Wierman. “Overcoming limitations of game-theoretic distributed control.”
- [09] Wei Chen, Dayu Huang, Ankur Kulkarni, Jayakrishnan Unnikrishnan, Quanyan Zhu, Prashant G. Mehta, Sean Meyn and Adam Wierman. “Approximate dynamic programming using fluid and diffusion approximations with applications to power management.”

Refereed Journal and Conference Publications

- [09] Lachlan Andrew, Adam Wierman, and Ao Tang. “Optimal speed scaling under arbitrary power functions.” To appear in *Performance Evaluation Review*.
- [09] Adam Wierman, Lachlan L.H. Andrew, and Ao Tang. “Power-aware speed scaling in processor sharing systems.” *Proceedings of INFOCOM 2009*.
- [09] Ho-Lin Chen, Jason Marden, and Adam Wierman. “On the impact of heterogeneity and back-end scheduling in load balancing designs.” *Proceedings of INFOCOM 2009*.
- [08] Adam Wierman, Lachlan L.H. Andrew and Ao Tang. “Stochastic analysis of power-aware scheduling.” *Proceedings of Allerton 2008*.
- [08] Jason Marden and Adam Wierman. “Distributed welfare games with applications to sensor coverage.” *Proceedings of Conference on Decision and Control (CDC) 2008*.
- [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*.
- [08] Misja Nuyens, Adam Wierman, and Bert Zwart. “Preventing large sojourn times using SMART scheduling.” *Operations Research* (2008) 56(1):88-101.
- [08] Adam Wierman and Misja Nuyens. “Scheduling despite inexact job-size information.” *Proceedings of ACM Sigmetrics 2008*.
- [08] Misja Nuyens and Adam Wierman. “The foreground-background queue: a survey.” *Performance Evaluation* (2008) 65(3-4):286-307.
- [07] Adam Wierman. “Revisiting the performance of large jobs in the M/GI/1 queue.” Invited paper in the proceedings of the Allerton conference.

- [07] Adam Wierman, Erik Winands and Onno Boxma. "Scheduling in polling systems." *Performance Evaluation* (2007) 64(9-12):1009-1028.
- [07] Adam Wierman, Erik Winands and Onno Boxma. "Scheduling in polling systems." *Proceedings of IFIP Performance 2007*.
- [07] Adam Wierman. "Fairness and classifications." Invited paper in *Performance Evaluation Review* (2007) 34(4):4-12.
- [06] Chang Woo, Adam Wierman, Sanjay Shakkottai, and Mor Harchol-Balter. "Tail asymptotics for policies favoring short jobs in a many-flows regime." *Proceedings of ACM Sigmetrics 2006*.
- [06] Bianca Schroeder, Adam Wierman, and Mor Harchol-Balter. "Closed versus open system models and their impact on performance and scheduling." *Proceedings of NSDI 2006*.
- [06] Adam Wierman, Takayuki Osogami, Mor Harchol-Balter, and Alan Scheller-Wolf. "How many servers are best in a dual-priority M/PH/k system?" *Performance Evaluation* (2006) 63:12,1253-1272.
- [06] Bianca Schroeder, Mor Harchol-Balter, Arun Iyengar, Erich Nahum, and Adam Wierman. "How to determine a good multi-programming level for external scheduling." *Proceedings of IEEE ICDE 2006*.
- [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*.
- [05] Takayuki Osogami, Adam Wierman, Alan Scheller-Wolf, and Mor Harchol-Balter. "Multi-server queueing systems with multiple priority classes." *Queueing Systems* (2005) 51:1,331-360.
- [05] Adam Wierman and Mor Harchol-Balter. "Classifying scheduling policies with respect to higher moments of conditional response time." *Proceedings of ACM Sigmetrics 2005*.
- [05] Adam Wierman, Mor Harchol-Balter, and Takayuki Osogami. "Nearly insensitive bounds on SMART scheduling." *Proceedings of ACM Sigmetrics 2005*.
- [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, Julia Salzman, Michael Jablonski, and Anant Godbole. "An improved upper bound for the pebbling threshold of the n -path." *Discrete Mathematics* (2004) 275, 367-373.
- [04] Adam Wierman, Nikhil Bansal, and Mor Harchol-Balter. "A note comparing response times in the M/GI/1/FB and M/GI/1/PS Queues." *Operations Research Letters* (2004) 32:1, 73-76.
- [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. "A unified framework for modeling TCP-Vegas, TCP-SACK, and TCP-Reno." *Proceedings of IEEE MASCOTS 2003*.

- [03] Adam Wierman and Mor Harchol-Balter. “Classifying scheduling policies with respect to unfairness in an $M/GI/1$.” *Proceedings of ACM Sigmetrics 2003*. **Received the Best Student Paper Award.**
- [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. “Asymptotic convergence of scheduling policies with respect to slowdown.” *Performance Evaluation* (2002) 49, 241-256.
- [02] Mor Harchol-Balter, Karl Sigman, and Adam Wierman. “Asymptotic convergence of scheduling policies with respect to slowdown.” *Proceedings of IFIP Performance 2002*.
- [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

- [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, New York, 2008.

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*.

CONFERENCE & INVITED TALKS

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

- Columbia University, Host: Ward Whitt
- Nov 2005 “Understanding the effects of SMART scheduling.”
INFORMS joint conference, Scheduling section
- July 2005 “Classifying scheduling policies with respect to moments of conditional response time.”
Joint CMU & TU/e Collaborative Workshop
- July 2005 “Classifying scheduling policies with respect to fairness and predictability.”
INFORMS Applied Probability conference, Applied Probability section
- June 2005 “Classifying scheduling policies with respect to higher moments of conditional response time.”
ACM Sigmetrics
- May 2005 “Classifying scheduling policies with respect to fairness and predictability.”
Lamps of ALADDIN workshop
- July 2004 “Formalizing SMART scheduling.”
EURANDOM Workshop on quantitative models for production and communication networks
- June 2004 “Formalizing SMART scheduling”
ACM MAMA workshop at Sigmetrics
- May 2004 “Scheduling web servers: Theory and practice.”
University of Calgary, Host: Carey Williamson
- May 2004 “Achieving low mean response times while providing fairness.”
CORS/INFORMS joint conference
- Oct 2003 “A unified framework for modeling TCP-Vegas, TCP-SACK, and TCP-Reno.”
IEEE MASCOTS
- Oct 2003 “Prioritization in multiserver queues.”
INFORMS joint conference, Applied Probability section
- June 2003 “Classifying scheduling policies with respect to unfairness in and M/GI/1.”
ACM Sigmetrics (Best Student Paper Award recipient)
- Sept 2002 “Asymptotic convergence of scheduling policies with respect to slowdown.”
IFIP Performance
- May 2002 “Understanding the slowdown of large jobs in an M/GI/1 system.”
ACM MAMA workshop at Sigmetrics
- Aug 2001 “Reduction of map exploration in S3P.”
MIT Lincoln Laboratory, Host: Jeremy Kepner
- July 2000 “The splitting number.”
East Tennessee State University, Host: Anant Godbole
- July 2000 “The splitting number.”
MAA MathFest

PROFESSIONAL SERVICE

Program Committee and Related:

- 2010 SIG Webmaster: ACM Sigmetrics
- 2010 Conference Chair: ACM HotMetrics
- 2010 Program Committee: Newton Institute Stochastic Processes in Comm. Sciences (SCS)
- 2009 Organizing Committee: Southern California Network Economics & Game Theory (SoCal NEGT)
- 2009 SIG Webmaster: ACM Sigmetrics
- 2009 Conference Chair: EURANDOM Young European Queueing Theorists Symp. (YEQT-III)
- 2009 Discussant: ACM HotMetrics

2009 Program Committee: Net-COOP
 2009 Program Committee: ACM HotMetrics
 2009 Program Committee: ACM GreenMetrics
 2009 Program Chair: IEEE ICCCN Network Algorithms and Perf. Eval. Track
 2009 Program Committee: ACM Sigmetrics/Performance
 2009 Program Committee: IEEE ITC-21
 2009 Program Committee: IEEE Mascots
 2009 Conference Webmaster: ACM Sigmetrics
 2008 SIG Webmaster: ACM Sigmetrics
 2008 Discussant: ACM HotMetrics
 2008 Publicity 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):

Journal of the ACM (JACM), IEEE Transactions on Networking (ToN), Operations Research (OR), Performance Evaluation (PEVA), Journal of Scheduling (JoS), Journal of Algorithms (JoS), Queueing Systems: Theory and Applications (QUESTA), Journal of Parallel and Distributed Computing (JPDC), Computer Networks, 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), 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.

Session Organizer/Chair (each listed only once):

INFORMS Applied Probability Conference, INFORMS General Meeting, ACM Sigmetrics, ACM HotMetrics, IFIP Performance.

Professional Memberships:

ACM, IEEE, INFORMS

TEACHING EXPERIENCE

Fall 2008 “Performance Modeling I”

Winter 2009 “Performance Modeling II”

Designed a new sequence covering introductory stochastic modeling, scheduling theory, and queueing theory. The course is very mathematically focused, but also includes real-world applications to web search, call centers, manufacturing systems, and server farms. The sequence had 8 registered students, but each lecture was attended by 10-12 students including 1 faculty member and several postdocs.

Online reviews of professor for Fall 2008: 6.9/7 69% response rate.

Online reviews of professor for Winter 2009: 5/5 86% response rate.

Winter 2007 Co-taught “Introduction to SISL: Topics in Algorithmic Game Theory” with John Ledyard. The course is jointly offered by CS and Economics and included students from 4 different departments. The course had 8 registered students and an attendance of 15-20,

including a mixture of undergraduates, graduate students, postdocs, faculty, and two students from USC.

Combination of online and paper reviews of professor: 6.7/7 83% response rate.

Fall 2007 Co-taught "Queueing Network Games" with Jason Marden (postdoc)
The attendance was approximately 20 students per lecture, including a mixture of graduate students, postdocs, and faculty from 6 different departments.
No reviews collected.

Spring 2006 Received the Carnegie Mellon Graduate Student Teaching Award.

Spring 2005 Received the Alan J. Perlis School of Computer Science Student Teaching Award.

Spring 2005 Received an Honorable Mention for the Carnegie Mellon Graduate Student Teaching Award.

Fall 2004 Teaching Assistant for undergraduate level "Probability and Computing."
Taught by: John Lafferty and Mor Harchol-Balter
This was a brand new course, so we designed all lectures and materials as we went. There were 2 TAs for around 25 students. My duties included helping to develop the organization of the course, designing and grading weekly homeworks, teaching a weekly recitation section, maintaining the course web site, and holding weekly office hours. I also organized and taught review sessions before the exams.
Reviews averaged 3.88/4 and are available upon request.

Spring 2004 Teaching Assistant for undergraduate level "Great Theoretical Ideas in CS."
Taught by: Steven Rudich and Anupam Gupta
There were 6 TAs for around 170 students. My duties included grading exams, designing and grading weekly homework assignments, leading a recitation section, and holding weekly office hours. I also organized and taught review sessions before the exams.
Reviews averaged 3.93/4 and are available upon request.

Fall 2002 Teaching Assistant for graduate level "Theory of Performance Modeling."
Taught by: Mor Harchol-Balter
I was the only TA for around 25 students. My duties included grading exams and weekly homework assignments in addition to lecturing four times and holding weekly office hours.
Reviews averaged 4.7/5 and are available upon request.

ADVISING EXPERIENCE

Affiliated postdoctoral fellows:

Jason Marden	2007-2009, Non-cooperative distributed control
Ho-Lin Chen	2007-2009, Scheduling in load balancing systems
Lachlan Andrew	2007-2008, Power management via speed scaling

Graduate student advising:

Ragavendran Gopalakrishnan Entered in 2008
Minghong Lin Entered in 2008

Undergraduate research advising:

Sherwin Doroudi 2008 SURF student – winner of a Rose Hills Foundation Fellowship
"A game theoretic approach to the sensor coverage problem."
Published at the Southern California Conf. for Undergrad Research

Benjamin Flora 2008 SURF student
"SMART online multi-objective scheduling."

Matthew Maurer 2008 SURF student
"Energy use reduction via power modeling."

Gwendolyn Stockman Senior honors thesis at CMU in 2005-2006.
"The impact of abandonment in multi-class priority queues."
Following graduation she attended University of Wisconsin-Madison
for graduate school.

Undergraduate academic advising:

Benjamin Flora Expected graduation 2010
Hamik Mukelyan Expected graduation 2010
Sean Seol Woong Choi Expected graduation 2011
Kelley Hecker Expected graduation 2012
Brian Merlob Expected graduation 2012
Riley Patterson Expected graduation 2012
Benjamin Slawski Expected graduation 2012

Graduate student qualification/thesis committees:

Daniel Wilhelm 2008, CNS candidacy exam

INSTITUTE SERVICE

2009-2010 Organized RSRG TGIF seminar
2009-2010 IST Lunch Bunch co-organizer
May 2009 Student-advisor lunch with undergraduate advisees
May 2009 Presentation for SISL
May 2009 Presentation for Lee Center
Apr 2009 Participated in prefrosh weekend dinner
Mar 2009 Participated in student-faculty lunch
Jan 2009 Presentation for the CMI faculty lunch
Nov 2008 Attended New Student's Parents day lunch
Nov 2008 Co-founded the Rigorous System Design Research Group (RSRG)
Oct 2008 Presentation for Lee Center
Oct 2008 Gave Lunch Bunch presentation
2008-2009 Organized RSRG TGIF seminar
2008-2009 IST Lunch Bunch co-organizer
2008-2009 Member of Student/Faculty Conference committee on CS

2008-2009 CS/EC Hiring committee
 2008-2009 CS Graduate Admissions committee
 Aug 2008 Gave talk on "Applying to PhD programs in CS" to undergraduates
 Jun-Aug 2008 SURF mentor for 3 undergraduate students
 Mar-Jun 2008 Research mentor for 1 student in CS 280
 Apr 2008 Organized Graduate Student Appreciation Week events
 Feb 2008 E11 Faculty Mentor
 Jan 2008 Presentation for SISL
 Nov 2007 Presentation for Lee Center
 Oct 2007 Met with EAS visiting committee
 Oct 2007 Presentation at CS retreat
 Oct 2007 Presentation at CMI retreat
 2007-2008 IST Lunch Bunch co-organizer
 2007-2008 Caltech racquetball association faculty advisor
 2007-2008 CS Graduate Student Admissions committee
 2007-2008 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
 2003-2006 Volunteer for the CMU Computer Science Department Open House

CONTRACT AND GRANT SUPPORT

7/2009 – 6/2014 NSF CNS-0846025
 CAREER: Towards a rigorous foundation for scheduling in modern systems
Adam Wierman (PI)
 8/2008 – 8/2011 NSF CCF-0830511
 Bridging probabilistic and competitive analysis of scheduling policies
Adam Wierman (PI)
 6/2009 – 9/2009 Yahoo Research
 Summer internship for my student *Ragavendran Gopalakrishnan*
 8/2008 Okawa Foundation research grant
Adam Wierman (PI)
 5/2008 Microsoft gift to Caltech
Adam Wierman (PI)
 5/2008 – 8/2008 Rose Hills Foundation fellowship for SURF student Sherwin Doroudi