David C. Parkes

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Citizenship: UK and USA
Date of Birth: July 20, 1973

Education

University of Oxford — Oxford, U.K.
Engineering and Computing Science, M.Eng (first class), 1995

University of Pennsylvania — Philadelphia, PA
Computer and Information Science, Ph.D., 2001
Advisor: Professor Lyle H. Ungar.
Thesis: *Iterative Combinatorial Auctions: Achieving Economic and Computational Efficiency*

Appointments

George F. Colony Professor of Computer Science, 7/12-present — Boston, MA
Harvard University

Co-Director, Data Science Initiative, 3/17-present — Cambridge, MA
Harvard University

Senior Research Scientist, 7/22-7/23 — London, England
DeepMind

Co-Director, Harvard Business Analytics Program, 9/17-present — Boston, MA
Harvard University

Area Dean for Computer Science, 7/13-6/17 — Cambridge, MA
Harvard University

Harvard College Professor, 7/12-6/17 — Cambridge, MA
Harvard University

Visiting Researcher, 1/12-1/13 — Cambridge (I and II)
Microsoft Research (MSR) Cambridge and MSR New England

Distinguished Visiting Scholar, 1/12-6/12 — Cambridge, England
Christ's College, University of Cambridge

Gordon McKay Professor of Computer Science, 7/08-6/12 — Cambridge, MA
Harvard University

Visiting Professor of Computer Science, 9/08-1/09 — Lausanne, Switzerland
Ecole Polytechnique Fédérale Lausanne

John L. Loeb Assoc. Prof. of the Natural Sciences, 7/05-6/08 — Cambridge, MA
and Assoc. Prof. of Computer Science
Harvard University

Assistant Professor of Computer Science, 7/01-6/05 — Cambridge, MA
Harvard University

Lecturer of Operations and Info. Management, Spring 2001 — Philadelphia, PA
The Wharton School, University of Pennsylvania

Other Appointments

Member, 2022- New York, NY
Council of Advisors of the Columbia Center for Dig. Fin. & Tech
Member, 2019- Amsterdam, Netherlands
Scientific Advisory Committee, CWI
Member, 2019- Cambridge, MA
Senior Common Room (SCR) of Lowell House
Member, 2019- Berlin, Germany
Scientific Advisory Board, Max Planck Inst. Human Dev.
Co-chair, 9/17-8/22 Cambridge, MA
FAS Data Science Masters
Co-chair, 9/17-9/23 Cambridge, MA
Laboratory for Innovation Science, Harvard University
Affiliated Faculty, 4/14- present Cambridge, MA
Institute for Quantitative Social Science
International Fellow, 4/14-12/18 Zurich, Switzerland
Center Eng. Soc. & Econ. Inst., U. Zurich
Research Intern, Summer 2000 Hawthorne, NY
IBM T.J.Watson Research Center
Research Intern, Summer 1997 Palo Alto, CA
Xerox Palo Alto Research Center

Research Interests

Artificial intelligence, Multi-agent systems, Digital economy, Machine learning, Data science, Market design, Preference modeling, Bounded rationality, Mechanism design, Algorithmic economics.

Significant Honors and Awards

- Elected, Fellow of American Association for the Advancement of Science (AAAS), 2022
- Elected, Council of Game Theory Society, 2019.
- Elected, Fellow of Association for Computing Machinery (ACM), 2018.
- Elected to the Computing Community Consortium (CCC), a standing committee of the CRA, April 2018.
- Named one of Harvard College's Favorite Professors: Class of 2010, Class of 2018.
- Distinguished Israel Pollak Lecturer, Technion University, April 2018.
- Elected Fellow of the Association for the Advancement of Artificial Intelligence (AAAI) Fellow, 2014.
- ACM SIGAI Autonomous Agents Research Award, 2017.
- William Mong Distinguished Lecturer, Engineering faculty, University of Hong Kong, 2016.

- Participant, National Academy of Engineering's 2015 US Frontiers of Engineering Symposium.
- Harvard College Professor, 2012-2017
- Harvard FAS Roslyn Abramson Award for Teaching, Spring 2008.
- NSF Early Career Development Award, 2003-2008.
- Participant, National Academy of Sciences Kavli Frontiers of Science Symposium, Nov 2007.
- Alfred P. Sloan Research Fellowship, 2005-2007.
- Thouron Award to study at the University of Pennsylvania, 1995-1996.

Additional Awards

- Best Higher Cognition paper published in the Cognitive Science Conference Proceedings, 2020, for "Too many cooks: Coordinating multi-agent collaboration through inverse planning", Sarah Wu, Rose Wang, James Evans, Joshua Tenenbaum, David Parkes and Max Kleiman-Weiner. Also Best Paper Award, NeurIPS 2020 Workshop on CooperativeAI.
- Co-organizer, Academic Symposium, "From Cells to Cell Phones: Transformative Data in a Changing World" for President Bacow inauguration, October 2018.
- Harvard SEAS Faculty Collaboration Award 2017.
- Member, Provost's Academic Leadership Forum, Harvard University, 2016-17.
- Penn Engineering Ph.D. Commencement Speaker, May 2015.
- CSCW'15 Honorable Mention for "Strategic Voting Behavior in Doodle Polls", R. Meir, D. C. Parkes and J. Zou.
- NIPS'14 Spotlight talk, "A Statistical Decision-Theoretic Framework for Social Choice", H. Azari Soufiani, D. C. Parkes and L. Xia.
- AAMAS'12 Best Paper Award for "Predicting Your Own Effort", D. F. Bacon, Y. Chen, I. Kash, D. C. Parkes, M. Rao and M. Sridharan
- ACM EC'12 Best Paper Award for "Payment Rules through Discriminant-Based Classifiers" P. Duetting, F. Fischer, P. Jirapinyo, J. K. Lai, B. Lubin, and D. C. Parkes.
- Harvard SEAS Capers McDonald Award for Mentoring, 2011-12.
- Member, AAAI Presidential Panel on Long-Term AI Futures, Asilomar Conference Center, Pacific Grove CA, February 2009.
- Nominated for Everett Mendelsohn Award for Excellence in Mentoring, Spring 2007 and 2009.
- AAMAS'06 Best Paper Award for "Instantiating the contingent bids model of truthful interdependent value auctions" (with Takayuki Ito).

- NIPS'04 Spotlight talk, "Approximately Efficient Online Mechanism Design," D. C. Parkes, S. Singh and D. Yanovsky.
- Advised twelve Thomas Temple Hoopes Prize winning senior theses
- Advised one Fay Prize winning senior thesis, 2017-18
- IBM Faculty Partnership Award, 2002 and 2003.
- IBM Graduate Fellowship Award, 2000-2001.
- IBM Institute for Advanced Commerce Award for Best Dissertation Proposal in Electronic Commerce, June 2000.
- Lord Crewe Scholarship, Lincoln College, University of Oxford, 1992-1995.

Significant Professional Service

- arXiv moderator, Computer Science and Game Theory(cs.GT), 2022- October 2023
- Co Editor-in-Chief, Harvard Data Science Review, July 2021-January 2023
- Council Member, the Computing Community Consortium of the Computing Research Association, 2018-2021
- Associate Editor, Journal of Artificial Intelligence Research (JAIR), Special Section on Human Computation and Artificial Intelligence, 2014-2018.
- Review Board Member, Heidelberg Laureate Forum Committee, 2013 -2021.
- Member of Advisory Board: European Commission FP7 Quality Collectives project, EPSRC ORCHID project, 2011-2017.
- Chair of ACM Special Interest Group on Electronic Commerce, 2011-2015.
- Associate Editor, ACM *Transactions on Economics and Computation*, 2011-September 2023.
- Associate Editor, *INFORMS Journal on Computing*, 2009- 2019.
- Associate Editor, *Journal of Autonomous Agents & Multi-Agent Systems*, 2007- 2020.
- Editor, *Games and Economic Behavior*, with responsibility to Computer Science, Auctions and Mechanism Design, Sept. 2007- 2018.
- Co-organizer, Whitehouse OSTP, CCC and AAAI Workshop on "AI for the Social Good" , Washington DC, June 2016.
- Member, Inaugural "One Hundred Year Study on Artificial Intelligence" Panel, Fall '15-Spring'16.
- Co Program Chair, Second AAAI Conference on Human Computation and Crowdsourcing (HCOMP-2014), November 2014.
- General Chair, 9th Workshop on Internet and Network Economics,Cambridge MA, December 2013.

- Co-Director, Indo-US Joint Center for Research in Machine Learning,Game theory and Optimization, April 2012- April 2014.
- Co-Director, 13th Trento Summer School on Market Design: Theory and Pragmatics, Trento Italy, June 25- July 6, 2012.
- Associate Editor, *Journal of Artificial Intelligence Research*, 2003-2007.
- Associate Editor, *Electronic Commerce Research*, 2002-2009.
- General Chair, *11th ACM Conference on Electronic Commerce* (EC'10), June 2010.
- Treasurer, International Foundation on Autonomous Agents and Multiagent Systems (IFAAMAS), 2008-2013.
- Program Co-Chair, *7th International Joint Conference on Autonomous Agents and Multi-Agent Systems* (AAMAS'08), May 2008.
- Program Co-Chair, *8th ACM Conference on Electronic Commerce* (EC'07), June 2007.
- Steering Committee Chair, Workshop on the Economics of Networks, Systems and Computation (NetECON), 2007-2013.
- Steering Committee Member, Workshop on Agent-Mediated Electronic Commerce (AMEC), 2003-05.

University and Departmental Service

- Member, FAS Standing Committee on Continuing Education, Fall'21-Summer'22
- Member, FAS Faculty Workload Committee, Fall'21-Spring'22
- Member, SEAS Dean's Cabinet Fall 2019-Summer'22
- Inaugural Faculty Chair, Summer Program for Undergraduates in Data Science (SPUDS), Summer 2021
- Co-Chair, Subcommittees on Division of Continuing Education and Space, FAS Financial Planning Working Group, 2020-21
- Member, FAS Dean's Faculty Resources Committee, Fall '15 - Sept '20
- Member, FAS Financial Planning Working Group, Spring 2020
- Co-chair, Harvard Data Science Initiative Steering Committee, 2017 - October 2023
- Co-chair, Harvard Data Science Initiative Planning Committee, 2017 - 2020.
- Chair, Senior faculty search: Machine learning, 2018-2020.
- Member, Senior faculty search: Artificial intelligence and society, 2018-2019.
- Member, Senior faculty search: Statistics department, 2018-2019.
- Co-chair of the Standing Committee on the S.M. Degree in Data Science, 2018-

- Member, Data Science Planning Committee 2015- 2017.
- Member, Data Science Education Sub-Committee, 2016- 2017.
- Member, Data Science Longwood Sub-Committee, 2016- 2017.
- Member, Harvard Science Task Force Committee, Spring '15- 2017.
- Member, Advisory board of Institute for Applied Computational Science, Harvard University, 2015 - September, 2023
- Co-chair, FAS/SEAS Committee on Allston and the School of Engineering and Applied Sciences, Fall'14 - Summer'20
- Co-chair, Provost's Task Force on Transportation for Allston Campus, Spring '13-2017.
- Member, SEAS Computational Science and Engineering Program Committee, Spring '13-'21
- Member, Computer Science Committee on Undergraduate Studies, Fall '03 - present
- Member, Harvard Academic Deans Council, 2014-2017
- Co-lead, Proposal for new FAS Data Science Masters, 2015-17
- Speaker, Harvard College Class of 1951 on their upcoming 65th Reunion, May 2016.
- Co-chair, FAS/SEAS Future of Libraries in Allston Committee, Spring'15-Spring'16
- Moderator of Panel on Engineering + Entrepreneurship: Making Robotics Fly, HBS, Hubweek October 2015.
- Speaker, FAS development, September 2015.
- Member, SEAS Steering Committee, August 2013-July 2017
- Member, FAS Search Advisory Committee to Select the Dean of the School of Engineering and Applied Sciences, Fall '14 - Spring '15.
- Member, SEAS Library Advisory Committee, Spring '13.
- Speaker, FAS New York Campaign Steering Committee Meeting, December 2013.
- Member, SEAS Allston Summer '13 Committee, Summer 2013.
- Member, FAS Sabbatical Policy Committee, Fall '10.
- Speaker, FAS New York Major Gifts Committee, November '10.
- Co-Chair, SEAS Strategic Committee on Applied Mathematics and Computation, Fall '09-Spring'10
- Co-chair Information, Technology and Management program review committee, Spring 2007.
- Co-Chair, SEAS Committee on the Transition from ITM to STM, Spring '07.
- Member, FAS Screening Committee, Fall '05- Spring '07.

- Member, FAS Herchel Smith Selection Committee, Spring '06.
- Member, DEAS Junior Faculty Committee on the Future of DEAS, Spring '06.
- Member, Computer Science Faculty Search Committee, multiple years
- Member, Applied Mathematics Committee on Undergraduate Studies, Fall '01- Spring '02, Spring '13.
- Member, DEAS Electronic Commerce Search Committee, Fall '04- Spring '05.
- Member, Subcommittee on the Degree of Doctor of Philosophy in Information, Technology and Management, Fall '02- 2009.
- Organizer, Computer Science Colloquium Series, Fall '02- Spring '08.
- Member, SEAS Graduate Admissions Committee, Fall '01- Spring '05; SEAS Admissions and Scholarship Committee, Fall '07- Spring '08, Fall '10- Spring '11.

Funding

- DARPA, Mechanism Design for Resource Coordination in Dynamic, Multi-Actor Worlds, '19-'22, $1,988,701
- Gift funding, Applied cryptography and society, $2,500,000, 2019- present
- IARPA, Hybrid Forecast Competition (HRL subcontract), '17-'18, $712,000
- Tata comm., Deep learning for econometrics, '18-'22, $1,169,943
- National Center for Women and Information Technology, Girls Who Code, '17-'18, $3,000
- FAS Dean's Competitive Fund for Promising Scholarship, The Design of Cooperative Society-Driven Systems, 11/2016 - 5/2017, $20,000
- Future of Life Institute Fund, Mechanism Design for Multiple AIs, 8/2015-7/2018, $200,000
- Google Award, Incentive-aligned Information Elicitation, 2015 - 2017, $294,377
- Co-PI, NIH Statistical and Quantitative Training in Big Data Health Science, '16-'21, $1.4m
- NSF AF-1301976 Algorithmic Crowdsourcing Systems, '13-'18, $999,977
- Indo-US Joint Center on Advanced Research in Machine Learning, Game theory and Optimization, Indo-US Science and Technology Forum, '12-'15, $133,000
- NSF CCF-1101570 *Heuristic Mechanism Design*, '11-'14, $360,000
- Yahoo! Faculty Research Grant, '09-'10, $25,000
- Network Science CTA Grant (BBN/Army Research), '10-'13, $374,000
- Microsoft Research Award for Work on Computational Environment Design, June 2009 $15,000
- NSF CCF-0915016 *Incentive-Compatible Machine Learning*, '09-'12, $500,000

- Yahoo! Faculty Research Grant, '07- '08, $25,000
- Microsoft Research Award, '08- '09, $117,000
- Department of Defense FA 8721-05-C-0003 (subcontract with CMU) '09-'10, $75,000
- Department of Defense FA 8721-05-C-0003 (subcontract with CMU)'08-'09, $75,000
- Alfred P. Sloan Research Fellowship, '05- '07, $45,000
- NSF DMS-0631636 *Model-Based Unsupervised Learning for Robust Indentification of Preferences and Behavior in Network Economies*, '06- '09, $300,000
- NSF IIS-0534620, *Distributed Implementation: Collaborative Decision Making in Multi-Agent Systems*, '05- '07, $168,000.
- NSF Career Award IIS-0238147, *Mechanism Design for Resource Bounded Agents: Indirect-Revelation and Strategic Approximations*, '03- '08, $599,000.
  REU Award (Summer '03, '05) $24,000.
- Federal Aviation Administration Award DTF A0101C00031, *Slot Auctions for US Airports*, '04- '05, $120,000.
- IBM Faculty Partnership Award, *Decentralized Allocation and Autonomic Computing*, '03- '04, $40,000
- IBM Faculty Partnership Award, *Multi-attribute Auction Design*, '02- '03, $40,000
- NASA Ames Research Award, *Collective Intelligence*, '02- '03, $40,000

Teaching

CS 136: Economics and Computation Fall '11, '12, Spring '13-'16, Fall '17, '18, '19, '21

- New undergraduate course
- Enrollment: 10, 43, 26, 49, 53, 53, 54, 66, 95, 109
- CUE overall course ratings (5.0 scale): 4.67, 3.87, 4.4, 4.4, 4.6, 4.5, 4.5, 4.6, 4.1
- CUE overall instructor ratings (5.0 scale): 4.78, 4.41, 4.6, 4.8, 4.8, 4.7, 4.7, 4.8, 4.7
- Also offered as E-CSCI 186 in some years (enrollment 9, 6, 3, 5)

CS 91r: Topics in Economics and Computation Spring 2022

- Small course, offered as a continuation of CS 136

Data-driven marketing Fall 18-present

- Harvard Business Analytics Program, co-taught quarterly with Sunil Gupta, Ayelet Israeli, and Eva Ascarza

CS 290: PhD Grad Cohort Research Seminar Fall 2021, Spring 2022

- New course, taught jointly with John Girash and Yaniv Yacoby

- Enrollment: 27
- CUE overall course ratings (5.0 scale): 4.6 (fall), 4.9 (spring)
- CUE overall instructor ratings (5.0 scale): 4.9 (fall), 4.8 (spring)

CS 282R: Topics in Machine Learning — Spring 2018 and Spring 2022

- Helped to administer course offered by Google researchers

Artificial intelligence — January 2019

- Two sessions, Short intensive program, HBS (January 2019)
- Two sessions, Executive education, HBS (June 2019)

CS 181: Machine Learning — Spring '17, '21

- Undergraduate course, co-taught with Sasha Rush ('17) and Finale Doshi-Velez ('21)
- Enrollment: 217
- CUE overall course ratings (5.0 scale): 3.6
- CUE overall instructor ratings (5.0 scale): 4.1

CS 182: Intell. Machines: Perception, Learning and Uncertainty — Spring '10, '11

- Undergraduate course
- Enrollment: 42, 45
- CUE overall course ratings (5.0 scale): 4.33, 4.33
- CUE overall instructor ratings (5.0 scale): 4.56, 4.56
- Also offered as E-CSCI 181 (enrollment 14, 10)

CIS 700: Computational Mechanism Design — Fall '08

- Graduate course at EPFL
- Enrollment: 10

CS 285: Multi-Agent Systems — Spring '09, Fall '10

- Graduate course
- Enrollment: 20
- CUE overall course ratings (5.0 scale): 4.2
- CUE overall instructor ratings (5.0 scale): 4.6

CS 182: Intelligent Machines: Reasoning, Actions and Plans — Fall '02-'05, Fall '07

- Undergraduate course
- Enrollments: 44, 36, 32, 25, 26
- CUE overall course ratings (5.0 scale): 4.0, 4.1, 3.8, 4.1, 4.2
- CUE overall instructor ratings (5.0 scale): 4.2, 4.4, 4.3, 4.0, 4.4

CS 286r: Topics at the Interface between CS and Economics Spring '02-'07, Fall '09

- New graduate course, rotating topics
- ***Computational Mechanism Design*** Spring '02, '05, '07
  - Enrollments: 29, 24, 14
  - CUE overall course ratings (5.0 scale): 4.4, 4.7, 4.6
  - CUE overall instructor ratings (5.0 scale): 4.8, 4.8, 5.0
- ***Electronic Market Design*** Spring '03
  - Enrollment: 32
  - CUE overall course rating (5.0 scale): 4.5
  - CUE overall instructor rating (5.0 scale): 4.7
- ***Iterative Combinatorial Exchanges*** Spring '04
  - Enrollment: 24
  - CUE overall course rating (5.0 scale): 4.1
  - CUE overall instructor rating (5.0 scale): 4.8
- ***Multi-Agent Learning and Implementation*** Spring '06
  - Enrollment: 24
  - CUE overall course rating (5.0 scale): 4.7
  - CUE overall instructor rating (5.0 scale): 4.8
- ***Assignment, Matching and Dynamics*** Fall '09
  - Enrollment: 26
  - CUE overall course rating (5.0 scale): 4.7
  - CUE overall instructor rating (5.0 scale): 4.9

AM 121: Intro to Optimization: Models and Methods Spring '08, Fall '14, '16

- New undergraduate course
- Enrollment: 37, 75, 61
- CUE overall course rating (5.0 scale): 4.2, 4.1
- CUE overall instructor rating (5.0 scale): 4.5, 4.3

FS 26n: Electronic Transactions: Economic and Comput. Thinking Fall '06

- Freshman seminar
- Enrollment: 10
- CUE overall course rating (5.0 scale): 4.6
- CUE overall instructor rating (5.0 scale): 5.0

OPIM 101: Intro. to the Computer as a Decision Analysis Tool Spring '01

- Co-lecturer, The Wharton School, University of Pennsylvania.
- Required freshman course for all business concentrators
- Enrollment 360 (4 sections)

Guest Lectures (Teaching)

- *Deep learning for economic design*, Simplicity and Complexity in Economics, Stanford University, April 2022
- *Differentiable Economics, Keynote speaker*, City University of Hong Kong Summer School (by Zoom), July 2021
- *Deep learning for economic design*, Simplicity and Complexity in Economics, Stanford University, April 2020
- *Deep learning for economic design*, EC 2099: Market Design, Harvard University, November'17, November'18.
- *Economic Reasoning and Artificial Intelligence*, CS 108: Intelligent Systems: Design and Ethical Challenges, Harvard University, November'16.
- *Dark pools and trust without transparency*, EC 2099: Market Design, Harvard University, November '15.
- *Combinatorial Exchanges*, ECON 1465 Market Design, Brown University, October '10
- *Mechanism Design for the Assignment Problem*, AM 50 Introduction to Applied Mathematics, Harvard University, March '09.
- *Adaptive Online Mechanism Design for Sequential Environments*, CS 590A Research Seminar in Artificial Intelligence, University of Washington, May '06.
- *ICE: An Iterative Combinatorial Exchange*, EC 2056 Market Design, Harvard University, April '06.
- *Mechanism Design for Dynamic Environments*, EC 2149 Computational Economics, Harvard University, Nov '05.
- *Mechanism Design for Dynamic Environments*, CS 15-892 Foundations of Electronic Marketplaces, Carnegie Mellon University, Nov '05.
- *Distributed Artificial Intelligence: Self-Interested Agents*, CS 50 Introduction to Computer Science, Harvard University, Dec '03.
- *Auction Design with Costly Preference Elicitation*, EC 2056 Market Design, Harvard University, March '03.
- *Distributed Artificial Intelligence: Self-Interested Agents*, CS 50 Introduction to Computer Science, Harvard University, Dec '02.

Distinguished Lecturer Series

[1] Deep Learning for Economic Discovery. *BEMACS lecture, Bocconi University*, October 2021.

[2] Machine learning for mechanism design. *Distinguished Israel Pollak Lecture, The Technion, Haifa Israel*, April 2018.

[3] Robust Methods to Elicit Informative Feedback. *Center for Info. Technology Policy Distinguished Lecturer, Princeton University, Princeton NJ*, May 2017.

[4] Incentive Engineering: Getting to the right inputs. *William Mong Distinguished Lecture, Engineering faculty, University of Hong Kong*, July 2016.

[5] Strategic Behavior in Coordination Platforms. *Distinguished Lecture, EECS department, Vanderbilt University*, March 2015.

[6] Computational Environment Design for Online Communities. *Invited distinguished speaker, Research center for Symbiotic computing, Nagoya Inst. of Technology*, December 2014.

[7] Mechanism Design as a Classification Problem. *Distinguished Speaker Series, Algorithmic Economics Seminar, Computer Science Department, Carnegie Mellon University, Pittsburgh PA*, November 2012.

[8] Computational Environment Design for Online Communities. *Distinguished Lecturer Series, Lady Margaret Lecture, Christ's College, University of Cambridge, Cambridge, England*, May 2012.

[9] Incentive Mechanism Engineering in the Internet Age. *Distinguished Lecturer Series, Computer Science and Automation, Indian Institute of Sciences, Bangalore, India*, November 2010.

[10] Incentive Mechanism Engineering in the Internet Age. *Distinguished Lecturer Series, Triangle Computer Science, Duke University, Durham, North Carolina*, September 2010.

[11] Incentive Mechanism Engineering in the Internet Age. *Distinguished Lecture Series, University of British Columbia, Canada*, March 2010.

Invited Talks and Panel Participation at Conferences

[1] New Challenges, New Tools and New Objectives for Market Design. **Panel**, *European Economic Association and the Econometric Society, Cologne, Germany*, August 2018.

[2] Deep learning for market design. **Plenary speaker**, *Annual Meeting of the German Economic Association, Freiburg, Germany*, September 2018.

[3] Deep learning for market design. **Plenary speaker**, *Kick-off Symposium of the AI research center, Nagoya Institute of Technology, Nagoya Japan*, May 2018.

[4] Data science challenges. *Young Presidents' Organization, New York City*, July 2018.

[5] Spatial-Temporal Pricing (and Coordination). *Uber Marketplace Optimization Data Science Symposium, San Francisco CA*, March 2017.

[6] On AI, Markets and Machine Learning. **Plenary speaker**, *Sixteenth International Conference on Antonomous Agents and Multiagent Sytems (AAMAS'17), Sao Paolo Brazil*, May 2017.

[7] Life in 2030: How AI Will Transform Work, Life, and Play. **Plenary speaker**, *American Association for the Advancement of Science session on Artificial Intelligence, People, and Society, organized by the Royal Society*, February 2017.

[8] How to elicit information when it is not possible to verify the answer. **Plenary speaker**, *Collective Intelligence 2016, New York*, June 2016.

[9] Mechanism Design through Statistical Machine Learning: Part II (Social choice and matching). **Plenary speaker**, *41th conference on The mathematics of operations research, Lunteren, The Netherlands*, January 2016.

[10] Mechanism Design through Statistical Machine Learning: Part I (Auctions). **Plenary speaker**, *41th conference on The mathematics of operations research, Lunteren, The Netherlands*, May 2016.

[11] The Tyranny of Algorithms? **Panel**, *MIT Conference on Digital Experimentation, Cambridge MA*, October 2016.

[12] **Panelist**: Preparing for the Future of Artificial Intelligence. *John F. Kennedy Jr. Forum, Kennedy School of Government, Cambridge MA,*, November 2016.

[13] The design of incentive mechanisms through statistical machine learning. **Plenary speaker**, *Optimization Days 2016 conference, HEC Montreal, Canada*, May 2016.

[14] Trust without Disclosure: Dark Pools and Secrecy-Preserving Proofs. **Plenary speaker**, *3rd Conference on Auctions, Market Mechanisms and Their Applications (AMMA), Chicago*, August 2015.

[15] Payment rules through disciminant-based classifiers. *Indo-US Symposium on New Directions in ML, Game Theory and Optimization, Bangalore, India*, January 2014.

[16] Flexible Parametric Ranking models. *Indo-US Symposium on New Directions in ML, Game Theory and Optimization, Bangalore, India*, January 2014.

[17] Peer Prediction. **Plenary speaker**, *Microsoft Research, Machine Learning Summit, Paris, France*, April 2013.

[18] Engineering Coordinated Behavior Across Socio-Economic Systems. **Plenary speaker**, *94th Annual Conference of Information Processing Society of Japan, Nagoya, Japan*, March 2012.

[19] Learning Payment rules through Discriminant-Based Classifiers. *Technion-Microsoft Electronic Commerce Day, The Technion, Haifa, Israel*, May 2012.

[20] Designing Corruption Proof Procurement Auctions. *Conference on Combating Corruption in Public Procurement, Rome, Italy*, July 2012.

[21] Approximate Incentive Compatibility in Combinatorial Exchanges. *9th Annual International Industrial Organization Conference, Boston, MA*, April 2011.

[22] Payment Rules for Combinatorial Auctions via Structural Support Vector Machines. **Plenary speaker**, *4th Annual New York Computer Science and Economics Day (NYCE '11), New York NY*, September 2011.

[23] Promoting Sustainability: Exploring the Role of Expensive, Indirect, and Hidden Markets. *2nd International Conference on Computational Sustainability (CompSust10) Cambridge, MA*, June 2010.

[24] The Interplay of Machine Learning and Mechanism Design. **Plenary speaker**, *Neural Information Processing Systems Foundation (NIPS '10), Vancouver, B.C., Canada*, December 2010.

[25] Incentive Engineering in the Internet Age. **Plenary speaker**, *The Twenty-Fourth AAAI Conference on Artificial Intelligence (AAAI '10), Atlanta, GA*, July 2010.

[26] When Analysis Fails: Heuristic Mechanism Design via Self-Correcting Procedures. **Plenary speaker**, *35th International Conference on Current Trends in Theory and Practice of Computer Science, (SOFSEM '09), Špindlerův, Mlýn, Czech Republic*, January 2009.

[27] **Panel:** AAAI Study on Long-Term AI Futures. In *21st Int. Joint Conference on Artificial Intelligence IJCAI'09*, Pasadena Conference Center, Pasadena, CA, July 2009.

[28] Self-Correcting Sampling-Based Dynamic Multi-Unit Auctions. *Conference on Economic Design 2009, Maastricht, The Netherlands*, June 2009.

[29] Dynamic mechanisms for Distributed Coordination: Models and Methods. **Semi-plenary speaker**, *The Third World Congress of the Game Theory Society (GAMES 2008), Chicago IL*, July 2008.

[30] Computational Ironing to Achieve Monotonicity in Dynamic Mechanisms. **Plenary Speaker**, *The 18th International Conference on Game Theory, Stonybrook NY*, July 2007.

[31] Computational Mechanism Design: An AI Agenda. **Plenary Speaker**, *The 17th Belgian-Dutch Conference on Artificial Intelligence, Brussels, Belgium*, October 2005.

[32] **Panel:** Spectrum Auctions with Package Bidding. In *31st Annual Research Conference on Communication, Information, and Internet Policy (TPRC'03)*, George Mason University Law School, Arlington, VA, September 2003.

[33] Computational Mechanism Design: Taming the Strategic Dragon Without Invoking the Complexity Monster. **Plenary Speaker**, *The 2nd International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS'03), Melbourne, Australia*, July 2003.

[34] Incremental Revelation in Computational Mechanisms. *American Association for the Advancement of Science Annual Meeting, Devner CO*, February 2003.

[35] Towards Iterative Combinatorial Exchanges. *3rd FCC Conference on Combinatorial Auctions, Aspen Institute's Wye River Conference Center, Queenstown MD*, November 2003.

[36] **Panel:** Feasible Auctions and Exchanges for FCC Spectrum Licenses. In *3rd FCC Conference on Combinatorial Auctions*, Aspen Institute's Wye River Conference Center, Queenstown, MD, November 2003.

[37] **Panel:** Agents and Electronic Commerce. In *2nd International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS'03)*, Melbourne, Australia, July 2003.

[38] Computational Mechanism Design in the Supply Chain. **Plenary Speaker**, *International Conference on Supply-Chain Management and Electronic Commerce, Beijing, China*, August 2002.

[39] **Panel:** What is the Best Feasible Mechanism for Auctioning FCC Spectrum Licenses? In *2nd FCC Conference on Combinatorial Auctions*, Aspen Institute's Wye River Conference Center, Queenstown, MD, November 2001.

[40] Combinatorial Exchanges. *2nd FCC Conference on Combinatorial Auctions, Aspen Institute's Wye River Conference Center, Queenstown MD*, October 2001.

Invited Talks and Panel Participation at Workshops

[1] Differentiable economics: Using deep learning to discover new market designs. *INFORMS Workshop on Market Design, King's College, London, UK*, June 2023.

[2] Credible Decentralized Exchange Design via Verifiable Sequencing Rules. *King's College, London, UK*, May 2023.

[3] Credible Decentralized Exchange Design via Verifiable Sequencing Rules. *Financial Technology Conference, Oxford-Man Institute, University of Oxford, UK*, March 2023.

[4] AI for use in research and teaching and also concerns around tools available to students. *Judge School, University of Cambridge, UK*, June 2023.

[5] Studying Algorithmic Economies Through a Reinforcement-Learning Lens. *Frankfurt School Artificial Intelligence and Business Analytics Workshop, Frankfurt, Germany*, July 2022.

[6] Differentiable Economics. *Machine Learning for Algorithms Workshop, MIT, Cambridge MA (on Zoom)*, July 2021.

[7] Optimal Economic Design through Deep Learning. *Microsoft Research New England Economics Workshop, Cambridge MA*, June 2019.

[8] Optimal Economic Design through Deep Learning. *14th SIGCOMM-ACMEC Workshop on the Economics of Networks, Systems and Computation (NetEcon), Phoenix AZ*, June 2019.

[9] Optimal Economic Design through Deep Learning. *WWW Workshop on the intersection of machine learning and mechanism design, San Francisco CA*, May 2019.

[10] Optimal Auction Design through Deep Learning. *STOC Workshop on New Frontiers of Automated Mechanism Design for Pricing and Auctions, Phoenix AZ*, June 2019.

[11] Deep Learning for Multi-Facility Location Mechanism Design. *ACMEC Workshop on Opinion Aggregation, Dynamics, and Elicitation (WADE), Ithaca, NY*, June 2018.

[12] Optimal Auctions through Deep Learning. *Simons Institute "Economics and Computation Reunion Workshop", Berkeley CA*, April 2017.

[13] Provably Trustworthy Dark Pools. Marketplace Innovation Workshop. *NYU Stern, New York, NY*, December 2016.

[14] **Plenary speaker**: How to elicit information when it is not possible to verify the answer. *IJCAI Algorithmic Game Theory Workshop, New York, NY*, July 2016.

[15] **Panel**: Regulatory Mechanisms. *MIT Media Lab "Artificial Intelligence and Governance" symposium, Cambridge MA*, April 2016.

[16] Enabling Spectrum Sharing in Secondary Market Auctions. Workshop on Complex Auctions and Practice. *Stony Brook, NY*, July 2016.

[17] **Panel**: Computers Gone Wild: Impact and Implications of Developments in Artificial Intelligence on Society. *Berkman Klein Center, Harvard University*, February 2016.

[18] Deep Learning for Multi-Facility Location Mechanism Design. *ACMEC Workshop on Opinion Aggregation, Dynamics, and Elicitation (WADE), Ithaca, NY*, Oct 2016.

[19] Causal Inference in Systems with Multiple Actors and Incentives. *ISAT/DARPA What If? Machine Learning for Causal Inference Workshop, Cambridge MA*, February 2016.

[20] **Discussion leader**: AI and economics. *US State Department roundtable discussion on artificial intelligence and foreign policy, Washington DC*, October 2016.

[21] Strong Truthfulness in Multi-signal Peer Prediction with Overlapping Tasks. *Simons Institute workshop on Algorithmic Game Theory and Practice*, November 2015.

[22] Strategic Behavior in Coordination Platforms. *Zhejiang University International Research Center of Service, Economics, Management and Computation*, December 2014.

[23] Robust Peer Prediction. *NIPS Workshop on Transactional Machine Learning and E-Commerce, Montreal Canada*, December 2014.

[24] Robust Peer Prediction. *ICML Workshop on Crowdsourcing and Human computation, Beijing, China*, June 2014.

[25] Robust Peer Prediction. *ComsNets Workshop on Social Networks, Bangalore, India*, January 2014.

[26] New Applications of Search and Learning to Problems of Mechanism Design. **Plenary speaker**, *8th Workshop on Internet and Network Economics (WINE'12), Liverpool, UK*, December 2012.

[27] The Interplay of Machine Learning and Mechanism Design. *Indo-US Symposium on New Directions in ML, Game Theory and Optimization, Bangalore, India*, November 2010.

[28] Preferences, Incentives, and Mechanism Design. *NSF Workshop on Engineered Systems Design, Arlington, VA*, February 2010.

[29] Mechanism Design and Accounting to Enable Efficient Peer Production and Spectrum Sharing. *CFEM Inauguration, Aarhus University, Aarhus, Denmark*, October 2010.

[30] **Panel**: Optimization in Multi-Agent Systems. In *AAMAS '10 Workshop*, Toronto, Canada, May 2010.

[31] Heuristic Mechanism Design. *NSF Computer Science and Economics Workshop, Ithaca, NY*, September 2009.

[32] Heuristic Mechanism Design. *BRICKS Workshop on Game Theory and Multiagent Systems, Amsterdam, The Netherlands*, June 2009.

[33] Dynamic Mechanism Design. *Workshop on Networks, Auctions, and Pricing, Cambridge, UK*, June 2009.

[34] Self-Correcting Sampling-Based Dynamic Multi-Unit Auctions. *Workshop on Information and Dynamic Mechanism Design, Hausdorff Institute, Bonn, Germany*, June 2009.

[35] Dynamic mechanisms for Distributed Coordination: Models and Methods. *CMS-EMS Workshop on Dynamic Mechanism Design, Kellogg School, Northwestern University, Evanston IL*, May 2008.

[36] Economic paradigms for the Control of Network Behavior. *AFOSR Complex Networks Workshop, Arlington VA*, May 2007.

[37] Combinatorial Markets in the Supply Chain. *NSF Workshop on Collaborative Logistics, Georgia Tech., Atlanta GA*, September 2007.

[38] **Panel**: Future Directions in Agent-Mediated Electronic Commerce. In *AAMAS Workshop on Agent-Mediated Electronic Commerce IX (AMEC-IX)*, Honolulu, Hawaii, May 2007.

[39] Periodically-Inaccessible Self-Interested Agents Efficient Online Mechanisms for Persistent. *Seminar on Computational Social Systems, Schloss Dagstuhl, Wadern Germany*, July 2007.

[40] Efficient Meta-Deliberation Auctions. *DIMACS Conference on Auctions with Transactions Costs, New Brunswick NJ*, March 2007.

[41] Introduction to Computational Mechanism Design. *AAMAS Workshop on Rational, Robust, and Secure Negotiations in Multi-Agent Systems (RSS'06), Hakodate, Japan*, May 2006.

[42] Sequential Decision Making Learning and Mechanism Design. *GATE Workshop, Kellogg School Northwestern University, Evanston IL*, October 2005.

[43] WiFi Auctions for Dynamic Environments: Last minute tickets and Grid computing. *Institute of Mathematical Sciences Workshop on Uncertainty and Information in Economics, National University of Singapore, Singapore*, June 2005.

[44] A Market-Inspired Approach to Multiagent Learning and Distributed Implementation. *DARPA Workshop on Distribtued Cognitive Systems, Somerville MA*, June 2004.

[45] Directions in Computational Mechanism Design. *DARPA Information Science and Technology (ISAT) Workshop on the "Network as Economy", Alexandria VA*, January 2004.

[46] Building a Prototype of an Iterative Combinatorial Exchange. *NEXTOR Workshop on Government, the airline industry, and the flying public: A new way of doing business, Aspen Institute's Wye River Conference Center, Queenstown MD*, June 2004.

[47] **Panel**: Design of Simultaneous Exchanges and Proxy Bidding Auctions. In *FCC Combinatorial Auctions and Exchanges Workshop*, Federal Communications Commission, Washington, DC, September 2003.

[48] **Panel**: Challenging Agent-Mediated Electronic Commerce. In *AAMAS Workshop on Agent-Mediated Electronic Commerce V (AMEC-V)*, Melbourne, Australia, July 2003.

[49] **Panel**: Feasible Large Scale Two-Sided Auctions with Package Bidding. In *FCC Spectrum Policy Task Force Working Group on Combinatorial Auction Design*, Federal Communications Commission, Washington, DC, July 2002.

[50] Mechanism Design for Complex Systems: Towards Autonomic Configuration. *Collectives and Design of Complex Systems Workshop, NASA Ames, Moffett Field CA*, August 2002.

[51] Minimal-Revelation VCG Mechanisms for Combinatorial Auctions. *Seminar on Electronic Market Design, Schloss Dagstuhl, Wadern, Germany*, June 2002.

[52] Minimal Preference Elicitation: An Equilibrium Approach. *DIMACS Workshop on Computational Issues in Game Theory and Mechanism Design, New Brunswick NJ*, November 2001.

Departmental Seminars and Colloquia

[1] Optimal Auctions through Deep Learning. *Economic Theory Seminar, U. Southern California (on Zoom)*, April 2022.

[2] Differentiable Economic Systems and Economic Discovery. *Information Systems, Questrom School of Business, Boston University*, April 2022.

[3] Differentiable Economics. *INFORMS Auctions and Market Design Section (on Zoom)*, May 2021.

[4] Optimal Economic Design through Deep Learning. *HBS Digital Initiative Seminar, Cambridge MA*, February 2019.

[5] Deep Learning for Optimal Economic Design. *MIT/Harvard Economic Theory Seminar, Cambridge MA*, March 2019.

[6] Peer prediction. *Game theory Seminar, The Technion, Haifa Israel*, April 2018.

[7] Optimal Economic Design through Deep Learning. *Social and Economic Data Science seminar, London School of Economics, London*, January 2018.

[8] Spatio-Temporal Pricing for Ridesharing Platforms. *Industrial Organization seminar, Harvard University, Cambridge MA*, November 2017.

[9] Robust Peer Prediction: Information without Verificiation. *Data Science in Longwood (DSIL) Seminar, Boston MA*, February 2017.

[10] Strong truthfulness in peer prediction. *GSBE-ETBC seminar, Maastricht University, Maastricht, The Netherlands*, January 2016.

[11] Long-term causal effects via behavioral game theory. *Applied Statistics Seminar, Harvard University, Cambridge MA*, November 2016.

[12] How to elicit information when it is not possible to verify the answer. *Machine Learning Institute, ETH Zurich*, December 2016.

[13] Incentive Compatible experiment design. *University of Maryland Micro Theory/IO seminar, College Park, MD*, May 2015.

[14] How to elicit information when it is not possible to verify the answer. *IOMS Colloquium, Department of Information, Operations and Management Sciences, NYU Stern School of Business, New York City*, December 2015.

[15] Robust peer prediction. *UCLA center for Engineering Economics, Learning and Network, Los Angeles CA*, February 2014.

[16] Robust Peer Prediction Methods. *Computer Science Colloquium, The Hebrew University of Jerusalem, Israel*, May 2012.

[17] Robust Peer Prediction Methods. *Microeconomics seminar, University of Cambridge, Cambridge England*, May 2012.

[18] Payment Rules through Discriminant-Based Classifiers. *University of Chicago Booth School of Business, Chicago IL*, December 2012.

[19] Mechanism Design through Monotone Branch-and-Bound Search. *London School of Economics, London, UK*, February 2012.

[20] Learning Payment rules through Discriminant-Based Classification. *IEOR-DRO Seminar, Columbia University, New York NY*, October 2012.

[21] A Random Graph Model of Multi-Hospital Kidney Exchanges. *Department of Informatics, University of Zurich, Zurich, Switzerland*, May 2012.

[22] Automated Design of Payment Rules for Combinatorial Auctions via Structural Support Vector Machines. *Boston College, Newton, MA*, April 2011.

[23] Trust, Feature Explosion and Simplicity–Some Cross-Cutting Issues in Computational Market Design. *Operations and Management Seminar Series, HBS, Boston, MA*, February 2010.

[24] Optimal Economic Design through Deep Learning. *Information Systems Seminar, Questrom School, Boston University*, April 2010.

[25] Incentive Mechanism Engineering in the Internet Age. *School of Computer Science, McGill University, Quebec, Canada*, April 2010.

[26] Heuristic Mechanism Design. *Economics Department, Bocconi University, Milan, Italy*, November 2010.

[27] Constructing Dynamic Auctions via Ironing and Stochastic Optimization. *Computer Science Department, Ecole Polytechnique Fédérale Lausanne, Lausanne, Switzerland*, November 2008.

[28] Explorations in Computational Mechanism Design. *Artificial Intelligence Research Institute, Barcelona Spain*, March 2008.

[29] Explorations in Computational Mechanism Design. *CART Seminar, Tepper School, CMU, Pittsburgh PA*, March 2008.

[30] Tell the truth: Incentives for Dynamic Environments. *IOMS, Stern School, New York University, New York NY*, November 2007.

[31] Tell the truth: Incentives for Dynamic Environments. *Computer Science Department, Cornell University, Ithaca NY*, October 2007.

[32] Efficient Dynamic Incentive Mechanisms. *Economics Department, Yale University, New Haven CT*, October 2007.

[33] Adaptive Online Allocation Mechanisms for Single-Valued Domains. *OR/MS Seminar series, University of Massachussets, Amherst MA*, April 2007.

[34] Adaptive Online Allocation Mechanisms for Single-Valued Domains. *Computer Science Department, Brown University, Providence RI*, February 2007.

[35] Adaptive Online Allocation Mechanisms for Single-Valued Domains. *Department of Economics, University College London, London, U.K.*, February 2007.

[36] Adaptive Online Allocation Mechanisms for Single-Valued Domains. *Applied Mathematics, University of Guelph, Guelph Canada*, January 2007.

[37] Adaptive Online Allocation Mechanisms for Single-Valued Domains. *Carnegie Mellon University ISR/COS/AI Seminar, Pittsburgh PA*, February 2007.

[38] Adaptive Sequential Decision Making with Self-interested Agents. *Computer Science Department, Wayne State University, Detroit MI*, October 2006.

[39] Adaptive Online Mechanism Design for Sequential Environments. *MIT Operations Research Center Seminar, Cambridge MA*, April 2006.

[40] Adaptive and Truthful Online Mechanisms in Single-Valued Preference Domains. *MIT Theory Colloquium, Cambridge MA*, September 2006.

[41] Distributed Reinforcement Learning with Self-Interested Agents. *Department of Economics, Washington University in St. Louis, St. Louis MO*, April 2005.

[42] Scalable and Expressive Iterative Combinatorial Exchanges. *Computer Science Department, Princeton University, Princeton NJ*, February 2005.

[43] Why Designing Markets for Resource Allocation in Distributed Computational Systems is an Important and Interesting Challenge. *MIT Joint CSAIL-LIDS Networking and Systems Seminar, Cambridge MA*, May 2005.

[44] Incentive-Compatible Multi-Armed Bandits. *University of Massachussets Artificial Intelligence Seminar, Amherst MA*, April 2005.

[45] WiFi Starbucks: Mechanisms for Sequential Decisions. *Negotiation, Organizations and Markets Seminar Series, Harvard Business School, Allston MA*, May 2004.

[46] Preference Elicitation in Proxied Multiattribute Auctions. *Department of Operations and Information Management, School of Business, University of Connecticut, Storrs CT*, February 2003.

[47] Preference Elicitation in Proxied Multiattribute Auctions. *CS& Economics Seminar Series, California Institute of Technology, Pasedena CA*, February 2003.

[48] Pricing WiFi @ Starbucks-Issues in Online Mechanism Design. *Socio-Technical Infrastructure for Electronic Transactions Seminar Series (STIET), University of Michigan, Ann Arbor MI*, March 2003.

[49] Overcoming Rational Manipulation in Mechanism Implementations. *Economics Department and Graduate School of Business, Stanford University, Palo Alto CA*, December 2003.

[50] Vickrey-Based Combinatorial Exchanges. *Decision Sciences, Fuqua School of Business, Duke University, Durahm NC*, April 2002.

[51] Iterative Generalized Vickrey Auctions. *MIT Operations Research Center, Sloan School of Management, Cambridge MA*, October 2001.

[52] Towards Efficient Auction Mechanisms for Electronic Commerce: Key Computational Challenges. *Electronic Commerce seminar series, North Carolina State University, Raleigh, NC*, October 2000.

[53] Iterative Combinatorial Auctions: Towards Economic and Computational Efficiency. *Operations and Information Management, The Wharton School, University of Pennsylvania, Philadelphia PA*, April 2000.

[54] Iterative Combinatorial Auctions. *Electronic Markets seminar series, R.H. Smith School of Business, University of Maryland, College Park MD*, December 2000.

Other Talks

[1] Raising the bar for Science, Engineering Teaching, and Research at Harvard. *Tradeline College and University Science and Engineering Facilities Conference, Boston MA*, October 2016.

[2] Long term Causal Effects in Multiagent Economies. *Fifth Game Theory World Congress*, July 2016.

[3] How to get people to try when all we have are reports from lots of different people Crowdsourcing information without 'programmatic gold' or. *Harvard Applied Math Society Fall seminar series*, October 2016.

[4] Strategic Voting Behavior in Doodle Polls. *Harvard Undergraduate Economics Association Dinner*, October 2014.

[5] Incentive Engineering in the Internet Age. *Harvard GSAS Alumni Day Symposium 2010, Cambridge, MA*, April 2010.

[6] Combinatorial Exchanges. *Yahoo! Labs, Bangalore, India*, November 2010.

[7] Quantifying Approximate Strategyproofness. *Computer Science and Engineering, University of Michigan, Ann Arbor, MI*, December 2009.

[8] An Agenda in Heuristic (Computational) Mechanism Design. *Microsoft Research New England, Cambridge, MA*, April 2009.

[9] Coordination via Dynamic Mechanism Design. *Google, Cambridge, MA*, May 2008.

[10] Coordination Mechanisms for Dynamic Multi-Agent Environments. *Multi-agents Group seiminar, Computer Science Department, Stanford University, Palo Alto CA*, January 2008.

[11] Coordination Mechanisms for Dynamic Multi-Agent Environments. *Center for Algorithmic Game Theory, Department of Computer Science, University of Aarhus, Aarhus, Denmark*, March 2008.

[12] Tell the truth: Incentives for Dynamic Environments. *Computer Science Department, EPFL, Lausanne, Switzerland*, October 2007.

[13] Adaptive Online Allocation Mechanisms for Single-Valued Domains. *University of Toronto AI Seminar, Toronto Canada*, January 2007.

[14] Adaptive Online Allocation Mechanisms for Single-Valued Domains. *University of Southampton AI Seminar, Southampton, U.K.*, February 2007.

[15] Incentive Mechanisms for Dynamic Environments. *DIMACS Workshop on the Boundary between Economic Theory and Computer Science, New Brunswick NJ*, October 2007.

[16] Stable Networks, the Role of Consent, and Information. *Radcliffe Exploratory Seminar on Dynamic Networks: Behavior, Optimization and Design, Cambridge MA*, October 2006.

[17] Optimal Coordinated Learning Among Self-Interested Agents in the Multi-Armed Bandit Problem. *MIT Reading Group on Game Theory, Cambridge MA*, April 2005.

[18] Applying Learning Algorithms to Preference Elicitation in Combinatorial Auctions. *Annual Meeting of the Institute for Operations Research and the Management Sciences (INFORMS'04), Denver CO*, October 2004.

[19] Applying Learning Algorithms to Preference Elicitation in Combinatorial Auctions. *Adaptive Systems and Interaction Group, Microsoft Research, Redmond WA*, December 2004.

[20] Applying Learning Algorithms to Preference Elicitation. *Radcliffe Seminar on Revealed and Latent Preferences: Economic and Computational Approaches, Cambridge MA*, May 2004.

[21] Distributed Implementation of Vickrey-Clarke-Groves Mechanisms. *Adaptive Systems and Interaction Group, Microsoft Research, Redmond WA*, June 2004.

[22] Distributed Implementation of Mechanisms. *MIT LCS Game theory reading group*, April 2004.

[23] Revenue-Based Combinatorial Exchanges for Electricity Markets. *Federal Energy Regulatory Commission, Washington DC*, February 2004.

[24] Efficient Online Mechanisms. *Annual Meeting of the Institute for Operations Research and the Management Sciences (INFORMS'03), Atlanta GA*, October 2003.

[25] Anytime Strategyproof Mechanisms. *Annual Meeting of the Institute for Operations Research and the Management Sciences (INFORMS'03), Atlanta GA*, October 2003.

[26] Strategyproof Infrastructure for Plug-and Play Negotiation. *MIT LCS Advanced Network Architecture Group, Cambridge MA*, March 2003.

[27] Minimal-Revelation VCG-Based Combinatorial Auctions. *Annual Meeting of the Institute for Operations Research and the Management Sciences (INFORMS'02), San Jose CA*, November 2002.

[28] Iterative Multiattribute Auctions. *Annual Meeting of the Institute for Operations Research and the Management Sciences (INFORMS'02), San Jose CA*, November 2002.

[29] Primal-Dual Methods in Iterative Auction Design. *Annual Meeting of the Institute for Operations Research and the Management Sciences (INFORMS'01), Miami Beach FL*, November 2001.

[30] VGC-Based Combinatorial Exchanges. *Annual Meeting of the Institute for Operations Research and the Management Sciences (INFORMS'01), Miami Beach FL*, November 2001.

[31] Designing Against Manipulation: Vickrey Based Payment Schemes. *Agents & Emergent Phenomena seminar series, IBM T.J. Watson Research Center, Hawthorne NY*, August 2000.

[32] Updating Vickrey-1961: Towards Multi-attribute Procurement Auctions. *Electronic Commerce Seminar series, IBM T.J. Watson Research Center, Hawthorne NY*, July 2000.

[33] Towards Iterative, Efficient and Strategy-Proof Combinatorial Auctions. *AI & Statistics seminar series, AT&T Research Labs, Florahm Park NJ*, November 2000.

Additional Professional Service

- Co-organize, NeurIPS 2021 Workshop on Learning in Presence of Strategic Behavior
- Co-organize, NeurIPS 2020 Workshop on Machine Learning for Economic Policy
- Member, Council for Game Theory, 2019-Present.
- Co-organize, Simons workshop on Information Design and Data Science, Berkeley CA, September 2019.
- Participant, CCC Visioning Workshop on Interaction for Artificial Intelligence, Denver CO, January 2019.
- Co-organize, CCC Visioning Workshop on Economics and Fairness, Cambridge MA, May 2019.
- Co-organize, Harvard Data Science Initiative Conference, Cambridge MA, October 2018, 2019, 2020.
- Co-host, Exploratory Open source research workshop, HBS, Cambridge MA, September 2018.
- Co-organize, IJCAI workshop on Game-Theoretic Mechanisms for Data and Information, Stockholm, Sweden, July 2018.
- Member of Scientific Advisory Board: Zhejiang University, University of Zurich and Alibaba, International Research Center of Service, Economics, Management and Computation, 2013 - 2017.
- Member, Chaum/Hurley Research board on Trustworthy Random Sample Elections, 2013-2018.
- Member of Scientific Advisory Board: Technion and Microsoft, Electronic Commerce Research Center, 2011-2017.
- International Research Partner, Aarhus University Center for Research in the Foundations of Electronic Markets, Aarhus, Denmark, 2010-2016.
- Co-organizer, AAAI Spring Symposium on "AI for the Social Good", March 2017.
- Meet with Senator Dominique Gillot (former Minister) and representative Claude de Ganay, members of French Parliamentary Office for Evaluation of Scientific and Technological Choices, January 2017, to discuss Artificial Intelligence.
- Member, UK Engineering and Physical Sciences Research Council (EPSRC) Review of UK's Robotics and Autonomous Systems Research Programme, London England, January 2017.

- Co-organizer, IACS Symposium "Data, Dollars, and Algorithms: The Computational Economy", Cambridge MA, January 2017.
- Member, Program Committee of IJCAI-ECAI-18 special track on the Evolution of the Contours of AI.
- Member, Workshop/tutorial committee, NIPS 2017.
- Co-editor, special issue of AI Magazine on the OSTP co-sponsored conferences on AI, 2016-17.
- Mentor, ACM SIGAI Career Network and Conference, October 2016.
- Co-organizer, Whitehouse OSTP, CCC and AAAI Workshop on "AI for the Social Good" , Washington DC, June 2016.
- Chair, ACM Trans. on Economics and Computation (TEAC) Editor in Chief Selection Committee, 2015-16.
- Member, Selection committee for Game Theory and Computer Science (Kalai) prize, August '15-July '16.
- Program Committee, Fifth Game Theory World Congress, July 2016.
- Co-organizer, Simons Institute workshop on Algorithmic Game Theory and Practice, November 2015.
- Invited Participant, Conference on "The Future of AI: Opportunities and Challenges", San Juan PR, January 2015.
- Co-Organizer, NIPS Workshop on Analysis of Rank Data: Confluence of Social Choice, Operations Research, and Machine Learning, 2014.
- Co-Organizer, NIPS Workshop on Crowdsourcing and Machine Learning, 2014.
- Co-Organizer, Indo-US Lectures Week in Machine Learning, Game Theory and Optimization, Indian Institute of Science, Bangalore, January 2014.
- Participant, CRA Snowbird Conference, July 2014.
- Co-editor, Special Issue of ACM Transactions on Internet Technology (TOIT) on Pricing Incentives in Networks, 2013.
- Co-organizer, W-PIN+NetEcon 2013: The Joint Workshop on Pricing and Incentives in Networks and Systems, Pittsburgh PA, June 2013.
- Co-organizer, First Cambridge Area Economics and Computation Day (CAEC'11), Cambridge MA, November 2011.
- Advisory Board, Second Cambridge Area Economics and Computation Day (CAEC'13), Cambridge MA, April 2013.
- Co-organizer, 2012 Ad Auctions Workshop, ACM EC 2012, Valencia, Spain, June 8, 2012.
- Arbiter AAAI Computer Poker Competition, 2010-2013.

- Mentor, AAMAS 2012 Doctoral Mentoring Consortium, Valencia Spain, June 2012.
- Visitor to Semester Programme on Mechanism Design, Hausdorff Institute, Bonn, Germany, June 2009.
- Co-Organizer, Radcliffe Institute Science Symposium on "Improving Decision Making: Interdisciplinary Lessons from the Natural and Social Sciences", April 2009.
- Co-Organizer, Radcliffe Exploratory Seminar on Cooperation and Human Systems Design, Radcliffe Institute, Cambridge, MA, March 2009.
- Workshops Chair, 7th ACM Conference on Electronic Commerce (EC'06), June 2006.
- Tutorials Chair, 3rd International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS'04), July 2004.
- Tutorials Chair, 5th ACM Conference on Electronic Commerce (EC'04), June 2004.
- North Americas' Sponsorship Chair, 2nd International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS'03), July 2003.
- Co-Organizer, 1st International Workshop on Agent Technology for Sensor Networks (ATSN-07), May 2007.
- Co-Organizer, Radcliffe Exploratory Seminar on Dynamic Networks: Behavior, Optimization and Design, October 2006.
- Co-Organizer, Radcliffe Exploratory Seminar on Revealed and Latent Preferences: Economic and Computational Approaches, May 2004.
- Program Co-Chair, Workshop on Computational Issues in Auction Design, as part of the DIMACS Special Focus on Computational and Socio-Economic Sciences, October 2004.
- Program Chair, 2nd Workshop on Trading Agent Design and Analysis (TADA'04), July 2004.
- Program Co-Chair, 2nd Workshop on Economics of Peer-to-Peer Systems (P2PECON'04), June 2004.
- Program Co-Chair, AAMAS Workshop on Agent Mediated Electronic Commerce V (AMEC-V), July 2003.
- Program Co-Chair, AAMAS Workshop on Agent Mediated Electronic Commerce IV (AMEC-IV), July 2002.
- Conference Senior Program Committees: IJCAI'11, AAMAS'03, AAMAS'04, IJCAI'05, AAMAS'06.
- Conference Program Committees: HCOMP '13, AAAI '13, ACM Symposium on Cloud Computing (SOCC) 2011, AAAI-11 Computational Sustainability and AI Track, EC'11, Agents'99, Agents'00, Agents'01, AAMAS'02, AAAI'02, EC'03, IJCAI'03, AAAI'03, ICAC'04, AAAI'04, AAMAS'05, UAI'06, AAAI'06, ICEC'06, AI&Math'06, Internet Monetization Track at WWW2010, SOFSEM'10.

- Workshop Program Committees: NeurIPS 2021 workshop on WHY-21 - Causal Inference and Machine Learning: Why now?, FC 2022 workshop on Decentralized Finance, AAMAS workshop on Fair Allocation in Multiagent Systems (FAMAS), May 2019, AAMAS workshop on Games, Agents and Incentives, (GAIW) May 2019, IJCAI-17 Workshop on Human-Robot Engagement in the Home, Workplace and Public Space, EC'16 Workshop on Ad Auctions, Gamification for Information (GamifIR) workshop '14, HCOMP'11, EC'11 Workshop on Social Computing and User Generated Content, IJCAI'01 Economic Models and Auctions Workshop, P2PECON'03, TADA'03, PINS'04, IJCAI'05 Workshop on Advances in Preference Handling, AAAI'05 Multiagent Learning Workshop, IBC'05, WINE'05, AMEC'05, AAAI'06 Workshop on Auction Mechanisms for Robot Coordination, ICAC'06 International Workshop on Smart Grid Technologies, GECON'06, GECON'07, AAMAS'07 Workshop on Adaptive and Learning Agents, Grid'07 Workshop on Economic Models and Algorithms for Grid Systems, NetEcon-IBC'07, HCOMP'09, GameSec'10.

- Journal Refereeing (**Computer Science**): J. of Artificial Intelligence Research, J. of Computer and Systems Sciences, ACM Transactions on Internet Technology, Naval Research Logistics, Artificial Intelligence J., IEEE Transactions on Computers, IEEE J. on Selected Areas in Communications, IEEE Transactions on the Internet, IEEE Transactions on Dependable and Secure Computing, J. of Algorithms, IEEE Transactions on Systems, Man, and Cybernetics–Part C: Applications and Reviews, J. of Autonomous Agents and Multi-Agent Systems, Management Science, J. of the ACM, IEEE Intelligent Systems, J. of Machine Learning Research, Communications of the ACM, Annals of Mathematics and AI, Computational Intelligence, Computer Networks J., Decision Analysis, Distributed Computing, Decision Support Systems, J. of Computer and Systems Sciences, Proceedings of the National Academy of Sciences, Theoretical Computer Science A, SIAM J. on Computing,

- Journal Refereeing (**Economics and Business**): Decision Analysis, Group Decision and Negotiation J., International J. of Game Theory, Games and Economic Behavior, American Economic Review, Economic J., J. of Decision Support Systems and Electronic Commerce, Electronic Commerce Research and Applications, Econometrica, J. of Economic Theory, Managerial and Decision Economics, Production and Operations Management, Theoretical Economics, Operations Research, Mathematics of Operations Research, IIE Transactions.

- Conference Refereeing: SODA'10, FOCS'01, AAAI'02 (student abstracts), STOC'02, NIPS'03, HOTOS-IX, PET'03, EC'04, STACS'04, AAAI'04, STOC'05, SIGCOMM'05, SODA'06, LATIN'06, FOCS'07.

- Grant reviewing: NSF Digital Society and Technologies (panelist), NSF Human Computer Interaction (panelist), NSF Artificial Intelligence and Cognitive Science (panelist), NSF IGERT (panelist), Israel Science Foundation, Canada NSERC.

- Research agency panels: DARPA ISAT Panel on "Network as Economy" Spring '04, DARPA ISAT Panel on "Distributed Cognitive Systems" Summer '04, NSF Workshop on "Cyberinfrastructure for the Social Sciences" Spring '05, AFOSR Workshop on "Complex Networks" Spring '07.

Graduate Research Advising

Zhe Feng Sept. '16- May '21.

- Ph.D. dissertation in Computer science: *"Machine Learning-Aided Economic Design"* .
- Recipient of Google PhD fellowship
- First position: Research Scientist, Google

Sophie Hilgard Sept. '15- August '21.

- Ph.D. dissertation in Computer science: *Machine Learning for Humans: Building Models that Adapt to Behavior"* .
- Siebel scholar
- First position: Research Scientist, Twitter

Paul Tylkin Sept. '14- August '20.

- Ph.D. dissertation in Computer science: *Multi-Agent Systems: Cooperative Helper Agents and Robustness to Adversarial Attacks.*
- First position: Postdoctoral fellow, DRL lab, MIT

Thibaut Horel Sept. '14- August '19.

- Co-advised by Edo Airoldi (Statistics)
- Ph.D. dissertation in Computer science: *Mechanisms of Social Interactions: Inference, Experimental Design and Optimization.*
- Recipient of IBM Student Research Award, 2018
- First position: Postdoctoral fellow, Institute for Data, Systems, and Society, MIT.

Debmalya Mandal Sept. '14- June '19.

- Ph.D. dissertation in Computer science: *Decision Making with Heterogeneous Agents: Elicitation, Aggregation, and Causal Effects.*
- First position: Postdoctoral Fellow, Columbia Data Science Institute.

Hongyao Ma Sept. '12- June '19.

- Ph.D. dissertation in Computer science: *Mechanism Design for Coordinating Behavior*
- First position: Postdoc at Uber, Postdoc at Caltech, then Assistant Professor, Decision, Risk and Operations, Columbia Business School

Panos Toulis Sept. '11- May '16.

- Co-advised by Edo Airoldi and Don Rubin (Statistics)
- Ph.D. dissertation in Statistics: *Implicit methods for iterative estimation with large data sets.*
- Recipient of Google Graduate Fellowship.
- First position: Assistant professor of Econometrics and Statistics, Chicago Booth School of Business, University of Chicago.

Victor Shnayder Sept. '09- May '16.

- Ph.D. dissertation in Computer Science: *Making Peer Prediction Practical.*
- Leave of absence 2012-15 at EdX.

Malvika Rao — Sept. '07- Nov '15.

- Ph.D. dissertation in Computer Science: *Incentives Design in the Presence of Externalities.*
- Recipient of a Canadian NSERC grant.
- First position: Mozilla

Hossein Azari Soufiani — Sept. '09- June '14.

- Ph.D. dissertation in Computer Science: *Revisiting Random Utility Models.*
- Recipient of Siebel Scholarship.
- First position: Researcher, Google Labs New York.

Jens Witkowski — Sept'10- June '14.

- Ph.D. dissertation in Computer science: *Robust peer prediction mechanisms*
- Albert-Ludwigs-Universität Freiburg, Germany, Co-advised with Bernhard Nebel
- First position: Postdoc, University of Pennsylvania.

James Zou — Sept. '08- Dec. '13.

- Ph.D. dissertation in Applied Mathematics: *Algorithms and Models for Genome Biology.*
- Recipient of NSF Graduate Fellowship.
- Simons Junior Fellow 2014.
- First position: Postdoc MSR New England and MIT, then Assistant Professor of Biomedical Data Science, Stanford University

John Lai — Sept. '09- July '13

- Ph.D. dissertation in Computer Science: *Truthful and Fair Resource Allocation.*
- Recipient of a Siebel Scholarship
- Recipient of an NDSEG Graduate Fellowship
- First position: DropBox, Inc. San Francisco, CA.

Haoqi Zhang — Sept. '07- Sept. '12

- Ph.D. dissertation in Computer Science: *Computational Environment Design.*
- Recipient of an NSF Graduate Fellowship
- Recipient of an NDSEG Graduate Fellowship
- First position: PostDoc at MIT with Rob Miller, then Assistant Professor of Computer Science, Northwestern University

Sven Seuken — Sept. '06- May '11

- Ph.D. dissertation in Computer Science: *Hidden Markets: Designing Efficient but Usable Market-based Systems.*
- Recipient of MSR Graduate Fellowship

- First position: Assistant Professor of Computation and Economics, Department of Informatics, University of Zurich

Chaki Ng — Sept. '01- Sept. '11

- Ph.D. dissertation in Computer Science: *Online Mechanism and Virtual Currency Design for Distributed Systems.*
- Co-advised with Margo Seltzer
- First position: SVP Product, Music Group Connected Content, Viacom

Shaili Jain — Sept. '07- Sept. '10

- Ph.D. dissertation in Computer Science: *Incentives in Social Computing.*
- Recipient of an NSF Graduate Fellowship
- Recipient of an ATT Graduate Fellowship
- First position: CI Fellowship at Yale University with Joan Feigenbaum, then Applied Researcher, Microsoft

Ben Lubin — Sept. '05- Sept. '10

- Ph.D. dissertation in Computer Science: *Combinatorial Markets in Theory and Practice: Mitigating Incentives and Facilitating Elicitation.*
- Recipient of a Siebel Fellowship
- Recipient of a Yahoo! Key Technical Challenge (KTC) grant.
- First position: Assistant Professor, School of Management, Boston University

Florin Constantin — Sept. '04- June '09

- Ph.D. dissertation in Computer Science: *Expressiveness and Optimization under Incentive Compatibility Constraints in Dynamic Auctions.*
- First position: Post Doc with Nina Balcan, Georgia Tech, then Optimization Software Engineer, A9.com

Katy Milkman — Sept. '04- June. '09

- Co-advised with Prof. Max Bazerman
- Ph.D. dissertation in Information, Technology and Management: *Studies of Intrapersonal Conflict and Its Implications.*
- Winner of HBS George S. Dively Award for Outstanding Pre-Dissertation Research, 2008.
- Winner of Whitebox Fellowship for a short-term visit to Yale University
- First position: Assistant Professor, OPIM Department, The Wharton School, University of Pennsylvania, Philadelphia PA.

David Chen — Sept. '03- June '09

- Co-advised with Prof. Peter Coles
- Ph.D. dissertation in Science, Technology and Management: *Essays on Mobile Advertising and Commerce.*
- First position: Vice President, Product Management, Triangulate, Inc.

Pavithra Harsha — Sept. '03- Sept. '08

- Co-advised with Prof. Cynthia Barnhart

- Ph.D. dissertation (MIT) in Operations Research: *Mitigating Airport Congestion: Market Mechanisms and Airline Response Models.*
- First position: Post Doc at MIT with Munther Dahleh, then Research Staff Member, IBM

Ruggiero Cavallo Sept. '02- May '08

- Ph.D. dissertation in Computer Science: *Social Welfare Maximization in Dynamic Strategic Decision Problems.*
- First position: Post Doc at Yahoo! Research New York, then Researcher, Microsoft Research

Jacomo Corbo Sept. '02- May '08

- Ph.D. dissertation in Computer Science: *Multiparty Large-Scale Network Formation: Economic Models and Mechanisms.*
- Recipient of a Fonds de la recherche en santé du Québec (FQRNT) fellowship.
- First position: Post Doc with Profs. K. Hosanager and R. Guerin, U. Penn.; Assistant Professor, University of Ottowa

Christopher Thorpe Sept. '04- May '08

- Co-advised with Prof. Michael Rabin
- Ph.D. dissertation in Computer Science: *Provably Correct, Secrecy Preserving Computation and its Applications in Auctions and Securities Exchanges.*
- First position: Founder, Blueleaf

Jolie Martin Sept. '02- May. '08

- Co-advised with Prof. Michael Norton (HBS)
- Ph.D. dissertation in Information, Technology and Management: *Seeing the Forest for the Trees: Information Aggregation in Online Decision-Making.*
- First position: Postdoctoral Researcher in the Dynamic Decision Making Laboratory at CMU's Department of Social and Decision Sciences, then Quantitative User Experience Researcher, Google

Jeffrey Shneidman Sept. '02- Nov. '08

- Co-advised with Prof. Margo Seltzer
- Ph.D. dissertation in Computer Science: *Rational Failure in Distributed Systems.*
- First position: Boston University Law School

Laura Kang Sept. '02- Nov. '08

- Ph.D. dissertation in Computer Science: *Open Computational Mechanism Design.*
- First position: World Evolved Services, New York, NY

Sébastien Lahaie Sept. '02- Nov. '07

- Ph.D. dissertation in Computer Science: *A Modular Framework for Multi-Agent Preference Elicitation.*
- Recipient of Canadian NSERC fellowship.
- First position: Research Scientist at Yahoo! Research, New York NY.

Adam I. Juda Sept. '01- May '07.

- Ph.D. dissertation in Information, Technology and Management: *Coordination and Costly Preference Elicitation in Electronic Markets.*
- Co-advised with Pai-Ling Yin, HBS.
- Winner of HBS George S. Dively Award for Outstanding Pre-Dissertation Research, 2005.
- First position: Google, Inc., New York NY.

C. Jason Woodard Sept. '00- May '06.

- Ph.D. dissertation in Information, Technology and Management: *Architectural Stategy and Design Evolution in Complex Engineered Systems.*
- Co-advised with Carliss Baldwin, HBS.
- Winner of HBS George S. Dively Award for Outstanding Pre-Dissertation Research, 2003.
- First position: Assistant Professor, School of Information Systems, Singapore Management University.

Current Ph.D. Students:

- Jeff Jiang (2nd year Ph.D.)
- Gili Rusak (2nd year Ph.D.; co-advised with Ariel Procaccia)
- Tonghan Wang (2nd year Ph.D.)
- Gary Qiurui Ma (3rd year Ph.D.)
- Hugh Zhang (3rd year Ph.D.)
- Zhou Fan (4th year Ph.D.)
- Sai Srivatsa Ravindranath (4th year Ph.D.)
- Mark York (6th year Ph.D.; co-advised with Munther Dahleh, MIT).
- Eric Mibuari (7th year Ph.D).
- Daniel Moroz (on leave).
- He Sun (8th year Ph.D.; co-advised with Hui Chen, MIT)

Ph.D. Committee Chair:

- Hyunkwang Lee (Harvard University, February 2020).
- Anna Huang (Harvard University, April 2019).

Visiting Ph.D. students, and Research Assistants:

- Rakshit Trivedi, Research Fellow, Fall 2020- Spring 2021
- Brian Chu, Research Fellow, Fall 2020
- Darshan Chakrabarti, Research Fellow, Fall 2020 - Spring 2021

- Sai Srivatsa Ravindranath, Research Fellow, April 2018 - August 2020.
- Michael Neuder, September 2019 - Spring 2020
- Barton Lee (Fall 2019, University of New South Wales) Supervised research on political science and blockchains.
- Arpit Agarwal (Sept - Dec '15, IISc. Bangalore, India). Supervised research on multi-task peer prediction.
- Aadirupa Saha (Sept - Dec '15, IISc. Bangalore, India). Supervised research on dueling bandits.
- Rediet Abebe (Fall '14 - Spring'15).
  Supervised research on *fair resource allocation and information propagation dynamics.*
  Continued to Ph.D. program at Cornell University.
- Harikrishna Narasimhan (Sept - Dec'14, IISc. Bangalore, India.)
  Supervised research on *Machine learning and mechanism design.*
  First position: Postdoc, Paulson School of Engineering, Harvard University.
- Moritz Drexl (Jan.- July '13, Bonn Graduate School of Economics, Germany.) Supervised research on combinatorial auctions.
- Ludek Cigler (June- July '11, Artificial Intelligence Lab, EPFL, Switzerland.)
  Supervised research on *Learning and Mechanisms.*
  First position: Software engineering and data scientist, Facebook.
  First position: Postdoc, U. Penn with Michael Kearns.
- Paul Dütting (Summer 2010, EPFL, Switzerland.)
  Supervised research on *Algorithmic Mechanism Design.*
  First position: Senior Research Assistant with Peter Widmayer, ETH Zurich, then Assistant Professor position in the Department of Mathematics at London School of Economics.
- Sujit Gujar (Summer 2009, Indian Institute of Science, Bangalore.)
  Supervised research on *Dynamic mechanism design without money.*
  First position: Postdoc, EPFL with Boi Faltings.
- Debasis Mishra (Summer 2003, Industrial Engineering, University of Wisconsin.)
  Supervised research on *Iterative generalized Vickrey auctions.*
  First position: Assistant Professor, Planning Unit, Indian Satistical Institute, New Delhi.
- Loan Le (Summer '04, SEOR, George Mason University)
  Supervised research on *Auctions for slot allocation at LaGuardia Airport.*
- Rajdeep Dash (Fall '04, Computer Science, University of Southampton, U.K.)
  Supervised research on *Faithful distributed constraint optimization.*
  First position: Senior Expert, McKinsey and Company.
- Adrian Petcu (Summer '06, Artificial Intelligence Lab., EPFL, Switzerland.)
  Supervised research on *Budget-balanced, distributed mechanisms.*
  Member of Dissertation Committee.
  First Position: SAP, Switzerland.

Post-doctoral Fellows

- Keyon Vafa (September 2023 - present; HDSI postdoctoral fellow)
- Michael Curry (September 2023 - February 2024)
- Matheus Ferreira (September 2021- July 2024)
  – First position, Assistant Professor, University of Virginia
- Francisco Marmolejo-Cossio (July 2021- present)
- Gali Noti (December 2020- December 2022; jointly with Yiling Chen and Noam Nisan)
  –First position, Postdoctoral fellow, Cornell University
- Yonatan Sompolinsky (May 2021- July 2023)
- Rakshit Trivedi (August 2021- January 2023)
  –First position, Postdoctoral fellow, MIT
- Manuel Wüthrich (September 2021- present; jointly with Ariel Procaccia)
- Xintong Wang (January 2021 - September 2023)
  –First position, Assistant Professor, Rutgers University
- Matthias Gerstgrasser (January 2020 - present)
- Gianluca Brero (March 2020- July 2022)
  – First position, postdoctoral fellow, Brown University
- Karianne Bergen (August 2019-December 2020, HDSI Fellow)
  –First position, Assistant Professor, Data Science Initiative and Department of Earth, Environmental and Planetary Sciences
- Alon Eden (September 2019- July 2022)
  – First position, Assistant Professor, The Hebrew University of Jerusalem
- Max Kleiman-Weiner (September 2018 - May 2020, HDSI and CRCS Fellow, jointly with Sam Gershman and Fiery Cushman)
  –First position: co-founder, Common Sense Machines
- Sarah Keren (September 2018 - July 2021, CRCS Fellow, jointly with Barbara Grosz and Jeffrey Rosenschein)
  –First position: Assistant Professor, The Technion
- Haifeng Xu (September 2018 - July 2019, jointly with Yiling Chen)
  –First position: Assistant Professor of Computer Science, University of Virginia
- Shreyas Sekar (August 2018 - July 2020, LISH Fellow, jointly with Karim Lakhani)
  –First position: Assistant Professor, Operations Management and Statistics, Rotman School, University of Toronto
- Berk Ustun (September 2017 - July 2020, CRCS Fellow, jointly with Flavio Calmon)
  –First position: Assistant Professor, Computer Science and Engineering, University of California, San Diego

- Hau Chan (September 2017 - June 2018, HISL Fellow)
  – First position: Assistant Professor, University of Nebraska-Lincoln
- Nir Rosenfeld (September 2017 - August 2020, CRCS Fellow, jointly with Yaron Singer)
  – First position: Assistant Professor, Faculty of Computer Science, The Technion
- Goran Radanovic (November 2016-August 2019, CRCS Fellow)
  –First position: Research Group Leader, Max Planck Institute for Software Systems, Saarbrücken, Germany
- Lior Seeman (September 2015- August 2016, CRCS Fellow, jointly with Yaron Singer)
  –First position: Uber
- Fei Fang (September 2016- July 2017, CRCS Fellow)
  –First position: Assistant Professor, Inst. for Software Research, School of Computer Science, CMU
- Nisarg Shah (September 2016- July 2017, CRCS Fellow)
  –First position: Assistant Professor of Computer Science, University of Toronto
- Harikrishna Narasimhan (September 2015 - September 2018)
  – First position: Research Scientist, Google
- Reshef Meir (September 2013 - June 2015, CRCS Fellow)
  –First position: Asst. Professor Industrial Engineering, The Technion
- Tanmoy Chakraborty (July 2011- June 2013, CRCS Fellow)
  –First position: Facebook
- Lirong Xia (July 2011- June 2013, CRCS Fellow)
  –First position: Assistant Professor of Computer Science, RPI
- Ariel Procaccia (September 2009 - July 2011, CRCS Fellow and Rothschild Postdoctoral Fellow)
  –First position: Assistant Professor of Computer Science, CMU
- Ian Kash (September 2009 - July 2011, CRCS Fellow)
  –First position: Research scientist, Microsoft Research UK
- Felix Fischer (Jan 2010- December 2011, DFG Fellow)
  –First position: Lecturer, Statistical Laboratory, University of Cambridge

PhD Committee Membership

- Hsiang Hsu (Harvard University, April 2023)
- Kai Wang (Harvard University, May 2023)
- Yaniv Yacoby (Harvard University, May 2023)
- Jackson Killian (Harvard University, May 2023)
- Nao Ouyang (Harvard University, September 2023)

- Paul Gölz (CMU, August 2022)
- Sherry Zhang (Harvard University, July 2022)
- Chara Podimata (Harvard University, June 2022)
- Juntao Wang (Harvard University, April 2022)
- Xin Chen (Harvard University, January 2022)
- Zhun Deng (Harvard University, December 2021)
- Yingying Li (Harvard University, July 2021)
- Dimitris Kalimeris (Harvard University, July 2021)
- Andrew Ross (Harvard University, May 2021)
- Arpit Agarwal (U. Pennsylvania, 2021)
- Christina Ilvento (Harvard University, December 2020)
- Jinrui Gan (University of Oxford, November 2020)
- Adam Breuer (Harvard University, October 2020)
- Hyunkwang Lee (Harvard University, May 2020)
- Yoon Kim (Harvard University, February 2020)
- Gianluca Brero (University of Zurich, January 2020)
- Rediet Abebe (Cornell University, November 2019)
- Michael Els (Harvard Business School, October 2019)
- Bradley McDanel (Harvard University, April 2019)
- Arjumand Masood (Harvard University, April 2019)
- Eric Balkanski (Harvard University, May 2019)
- Miriam Cha (Harvard University, May 2019)
- Guannan Qu (Harvard University, May 2019)
- Jean Pouget-Abadie (Harvard University, September 2018)
- Yuqing Kong (U. Michigan, May 2018)
- Andrew Miller (Harvard University, April 2018)
- Ming Yin (Harvard University, May 2017)
- Adish Singla (ETH Zurich, Switzerland, December 2016)
- Ofra Amir (Harvard university, November 2016)

- Goran Radanovic (EPFL, Switzerland, September 2016)
- Bo Waggoner (Harvard University, May 2016)
- Sam Taggart (Northwestern, Qual exam May 2015)
- Omer Lev (Hebrew University, May 2015)
- Andrew Mao (Harvard University, May 2015)
- Michael Gelbart (Harvard University, May 2015)
- Jens Witkowsi (U. Freiburg, May 2014)
- Lampros Stavrogiannis (Southampton University, September 2014)
- Moritz Drexl (U. Bonn, September 2014)
- Nima Haghpanah (Northwestern U., July 2014)
- Marco Rocco (Politecnico di Milano, February 2015)
- Alice Xi Gao (Harvard University, June 2014)
- Jon Bischof (Harvard University, August 2013)
- Mohammed T. Irfan (Stony Brook University, June 2013)
- Jonathan Ullman (Harvard University, May 2013)
- Michael Ruberry (Harvard University, September 2013)
- Paul Duetting (EPFL, March 2013)
- Ludek Cigler (EPFL, Lausanne Switzerland, November 2012)
- Albert Jiang (Univ. British Columbia, Vancouver Canada, November 2011)
- Rohan Murty (Harvard University, April 2011)
- Mingyu Guo (Duke University, May 2010)
- Ece Kamar (Harvard University, April 2010)
- Chih-Han Yu (Harvard University, April 2010)
- Patrick Jordan (University of Michigan, December 2009)
- Valentin Robu (CWI, July 2009)
- Eric Budish (Harvard University, April 2009)
- Philip Hendrix (Harvard University, April 2009)
- Pavithra Harsha (Massachusetts Institute of Technology, August 2008)
- Ankit Patel (Harvard University, August 2008)

- Adam Kirsch (Harvard University, April 2008)
- Adrian Petcu (Ecole Polytechnique Fédérale Lausanne, October 2007)
- Ben Edelman (Harvard University, April 2007)
- Pai-Hsiang Hsiao (Harvard University, February 2007
- Itay Fainmesser (Harvard, Business Economics, Qual. Exam in Fall 2006)
- Laura Serban (Harvard, Business Economics, Qual. exam in Fall 2006)
- Geoffrey Goodell (Harvard University, June 2006)
- Tim Rauenbusch (Harvard University, April 2004)

Masters Committee Membership

- Chris Croft (Masters in Data Science, Harvard SEAS, May 2023)
- Ethan Cowen (ALM Info. Tech., Harvard University Extension school, 2019-20)
- Nripsuta Saxena (Computational Science and Engineering, Harvard SEAS, 2017-18)
- Chao Gu (Master in Design Engineering, Harvard University, 2017-18)
- Wei Dai (Computational Science and Engineering, Harvard SEAS, 2015-16)
- Richard Kim (ALM Info. Tech., Harvard University Extension school, 2015-16)
  –Recipient of DCE Thesis Award
- Dimitris Papanikolaou (Massachusetts Institute of Technology, November 2010)

Undergraduate and Masters Research Advising

Luca D'Amico-Wong — Spring '22 - May '24

- Co-advised with Hugh Zhang and Gary Ma. A.B. thesis.

Dominik Bohnet Zurcher — Fall '23 - May '24

- Co-advised with Sai Ravindranath. A.B. thesis.

Philip Ndikum — Fall '23 - May '24

- Co-advised with Peter Kempthorne, MIT. S.M. thesis in Computational Science and Engineering.

Lars Ankile — Summer '23 - May '24

- Empirical and theoretical study of MEV on Ethereum. S.M. thesis in Data Science
- Co-advised with Matheus Ferreira.

David Zhang — Fall '22 - Spring '23

- A. B. thesis in Applied Mathematics: Combatting Collusion Between Reinforcement Learning Agents in Electricity Markets.

Chris Croft — Fall '22 - Spring '23

- S.M. thesis in Data Science: Learning Competitive Policies in Non-Cooperative Multi-Agent Reinforcement Learning.

Kevin Chen — Fall '21 - Spring '22

- A. B. thesis in Applied Mathematics: Collusion in Knowledge Elicitation for Lending
- Co-advised with Mark York.

Rithvik Rao — Fall '21 - Spring '22

- A.B. thesis in Computer Science and Mathematics: Laws of Large Numbers for Games on Sparse Random Networks.
- Co-advised with Benjamin Golub, Northwestern University.

Clara Li — Fall '21 - Spring '22

- A.B. thesis in Computer Science: Reinforcement Learning for Modeling Platform Economies Under Shock.
- Co-advised with Xintong Wang.

Jeff (Yanchen) Jiang — Fall '21 - Spring '22

- A.B. thesis in Computer Science and Mathematics: Learning to Sell Information.
- Co-advised with Sai Srivatsa Ravindranath.

Varun Tekur — Fall '21 - Spring '22

- A.B. thesis in Computer Science: Molecular Property Predictors for Downstream De Novo Generation.
- Co-advised with Marinka Zitnik.

Mason Meyer — Spring '21 - Fall '21

- A.B. thesis in Computer Science: Toward Generality: Building Better Counterfactual Regret Minimization for Imperfect Information Games.
- Co-advised with Hugh Zhang.

Esther Plotnick — Spring '21 - Fall '21

- A.B. thesis in Mathematics and Computer Science: Learning to Promote Cooperation in the Collective Risk Dilemma.
- Co-advised with Clifford Taubes.

Kathryn Wantlin — Fall '20 - Spring '21

- A.B. thesis in Computer Science.
- Co-advised with Sarah Keren.

Saffron Huang — Spring '20 - Fall '20

- A.B. thesis in Applied Mathematics: *Bi-Level Multi-Agent Reinforcement Learning for Intervening in Intertemporal Social Dilemmas.*
- Co-advised with Sarah Keren.

Nicolas Lepore — Fall '20 - Spring '21

- A.B. thesis in Computer Science.
- Co-advised with Gianluca Brero.

Vincent Li — Fall '20 - Spring '21

- A.B. thesis in Computer Science and Statistics.
- Co-advised with Alon Eden.

Yi Lin Wang — Fall '20 - Spring '21

- A.B. thesis in Computer Science.

Kevin Bi — Fall '20 - Spring '21

- A.B. thesis
- Co-advised with Gianluca Brero.

Tancredi Castellano Pucci — Fall '19 - Spring '20

- A.B. thesis in Computer Science: *Heartbeat of a Crypto-Economy: Transaction Information in a World with Central Bank Digital Currencies.*
- Co-advised with Daniel Moroz.

Christopher En — Fall '19 - Spring '20

- A.B. thesis
- Co-advised with Clifford Taubes, Zhe Feng, and Sai Srivatsa Ravindranath.
- A.B. thesis, Mathematics: *Introduction to Auction Theory.*

Yecheng (Jason) Ma — Fall '19 - Spring '20

- A.B. thesis, Computer Science: *From Adversarial Imitation Learning to Robust Batch Imitation Learning*, awarded **Thomas Temple Hoopes Prize** for outstanding undergraduate work.

Duncan Rheingans-Yoo — Fall '19 - Spring '20

- A.B. thesis in Computer Science: *Reinforcement learning for indirect mechanism design.*
- Co-advised with Alon Eden.

Shira Li — Fall '18 - Spring '19

- A.B. thesis, Mathematics and Computer Science: *Deep Learning for Two-sided Matching Markets*, awarded **Thomas Temple Hoopes Prize** for outstanding undergraduate work.
- Co-advised with Scott Kominers.

Matt Leifer — Fall '18 - Spring '19

- A.B. thesis, Applied Mathematics: *Don't Hate the Players, Hate the Game: Designing a Provably Trustworthy Stock Market in the Age of High-Frequency Trading*, awarded **Thomas Temple Hoopes Prize** for outstanding undergraduate work.

James Lennon — Fall '18 - Spring '19

- A.B. thesis, Computer Science: *Modeling Human Behavior in Space Invaders*
- Co-advised with Goran Radanovic and Paul Tylkin.

Suproteem Sarkar — Fall '18 - Spring '19

- A.B. thesis, Computer Science: *What makes an effective negotiator? Measuring sophistication, behavior, and learning in bargains*
- Co-advised with Max Kleiman-Weiner

Jiafeng (Kevin) Chen — Fall '18 - Spring '19

- A.B. thesis, Applied Mathematics: *Causal inference in matching markets*, awarded **Thomas Temple Hoopes Prize** for outstanding undergraduate work.
- Co-advised with Scott Kominers and Debmalya Mandal.

Elena Wu-Yan — Fall '18 - Spring '19

- A.B. thesis, Computer Science: *Present Pain, Future Gain: Overcoming Present Bias in Exercise Class Reservations via Mechanism Design*
- Co-advised with Hongyao Ma

William Long — Fall '18 - Spring '19

- A.B. thesis, Computer science and Government: *Escaping the State of Nature: A Hobbsian approach to Cooperation in Multi-agent Reinforcement Learning*, awarded **Thomas Temple Hoopes Prize** for outstanding undergraduate work
- Co-advised with Michael Rosen and Max Kleiman-Weiner

Aron Szanto — Fall '17 - Spring '18

- A.B. thesis *Defuse the News: Predicting Misinformation and Bias in News on Social Networks via Content-Blind Learning*, awarded **Thomas Temple Hoopes Prize** for outstanding undergraduate work.
- Co-advised with Nir Rosenfeld.
- Awarded **Captain Jonathan Fay Prize** for exceptional undergraduate thesis.

Robert Shaw — Fall '17 - Spring '18

- *Motivations for Forecasting Platforms.*
- Co-advised with Sophie Hilgard.

Duncan Rheingans-Yoo — Summer '17 - present

- Supported by PRISE.

- *Matching market design for ride-sharing platforms.*
- Co-advised with Scott Kominers and Hongyao Ma.

Katherine Chen — Fall '16 - Spring '17

- A.B. thesis *Incentive-aligned experimental design*, in Statistics.
- Co-advised with Panos Toulis.

Sam Green — Fall '16 - Spring '17

- A.B. thesis *Models of Reallocation without Money and generalized TTC*, in Computer Science.
- Co-advised with Nisarg Shah.

Jimmy Jiang — Fall '16 - Spring '17

- A.B. thesis *Planning to intervene under models of time inconsistency*, in Computer Science.
- Co-advised with Hongyao Ma.

Matthew Leifer — Summer '16 - Spring '19

- A.B. thesis (co-advised with He Sun)
- Supported by Harvard College Program for Research in Science and Engineering (PRISE).
- Project on Peer prediction with hetrogeneous tasks (led to paper in NIPS'16 CrowdML workshop).

Anson Kahng — Fall '15 - Spring '16

- A.B. thesis *Timing Objectives in Dynamic Kidney Exchange*, in Computer Science.
- Ph.D. in computer science, CMU.

Lisa Wang — Fall '15 - Spring '16

- A.B. thesis *Constructing Stable Matchings Using Preference Elicitation through Prices and Budgets*, in Computer Science and Mathematics.
- Co-advised with Hongyao Ma.

Roger Huang — Fall '15 - Spring '16

- A.B. thesis *Enhancing $ZH \to \ell\ell b\bar{b}$ Searches with Multiple Interpretations in the ATLAS Detector*, in Physics and Computer Science.
- Co-advised with John Huth.

William Chen — Spring '13 - Spring '14

- A.B. thesis *How to Order Sushi: A Nonparametric Approach to Modeling Rank Data*, in Statistics, awarded Thomas Temple Hoopes Prize for outstanding undergraduate work.
- Work led to paper "Generalized Method-of-Moments for Rank Aggregation" H. Azari Soufiani, W. Chen, D. C. Parkes, and L. Xia, in *Proc. Annual Conference on Neural Information Processing Systems (NIPS 2013), 2013.*
- Co-advised with Hossein Azari Soufiani.

Brandon Liu — Fall '13 - Spring '14

- A.B. thesis *Better than PageRank: Hitting Time as a Reputation Mechanism*, in Computer Science.
- Work led to paper "Personalized Hitting Time: A Manipulation-Resistant and Efficient Trust Mechanism", B. Liu, D. C. Parkes and S. Seuken, submitted to *Proc. AAMAS'15.*
- Marshall Scholar 2014-15.

Petch Jirapinyo — Fall '10-Spring '11

- A.B. thesis *Designing Payment Rules for Combinatorial Auctions with Structural SVMs.*
- Work led to paper "Payment Rules through Discriminant-Based Classifiers", P. Duetting, F. Fischer, P. Jirpinyo, J. Lai, B. Lubin, and D. C. Parkes *ACM Transactions on Economics and Computation, 2014.*

Jeremy Hoon — Fall '10-Spring '11

- A.B. thesis *RABID: Random Auctions for Bandwidth in Internet Devices.*
- Work led to paper "Truthful Prioritization for Dynamic Bandwidth Sharing", V. Shnayder, V. Kawdia, J. Hoon and D. C. Parkes, *Proc. 15th ACM Int. Symp. on Mobile Ad Hoc Networking and Computing (MobiHoc 2014), 2014.*

Yuga Cohler — Fall '10- Spring '11

- AB thesis *Optimal Envy-Free Cake-Cutting* in computer science and economics,
- Work led to paper "Optimal Envy-Free Cake Cutting" at AAAI'11
- Co-advised with Ariel Procaccia and John Lai

David Wu — Fall '10- Spring '11

- A.B. thesis *Move Ranking and Evaluation in the Game of Arimaa*, awarded **Thomas Temple Hoopes Prize** for outstanding undergraduate work
- Work led to paper "Wu, D. (2015). Designing a Winning "Arimaa Program." ICGA Journal, Vol. 38, No. 1, pp. 19-4 (2015)"
- David later developed the first program to defeat the best Arimaa player before the year 2020, winning $10,000 prize

Jerry Kung — Summer '09- Spring '11

- A.B. thesis *Incentive Design for Adaptive Agents* in computer science and economics,
- Herchel Smith fellowship to puruse Part III math tripos at Cambridge, then PhD in OR at MIT
- Work led to paper "Incentive Design for Adaptive Agents" in 10th Int. Conf. on Autonomous Agents and Multiagent Systems (AAMAS'11)
- Co-advised with Haoqi Zhang

Jie Tang — Fall '07- Spring '08

- A.B. thesis *Informativeness and Incentive Compatibility for Reputation Systems* in computer science and economics, awarded **Thomas Temple Hoopes Prize** for outstanding undergraduate work and received highest honors.
- Co-advised with Sven Seuken

- Ph.D. student UC Berkeley, Technical Staff OpenAI, Inc., Tech lead, Dropbox, Inc.

Erik Schultink — Fall '06- Spring '07

- A.B. thesis *Economic Approaches to Hierarchical Reinforcement Learning* in computer science, awarded **Thomas Temple Hoopes Prize** for outstanding undergraduate work.
- Co-advised with Ruggiero Cavallo.
- Facebook, and CTO at Tuenti.

Abe Othman — Fall '06- Spring '07

- A.B. thesis *The Dancer and the Dance: Agents, Beliefs and Actions in Prediction Markets.*
- Recevied highest honors in AM/EC and Ph.D. in computer science at CMU.
- Work led to paper "Time Inconsistency and Uncertainty Aversion in Prediction Markets," at the Third Workshop on Prediction Markets," I Corwin and A. Othman, in *Third Workshop on Prediction Markets* at ACM EC'08.
- Work led to paper "Zero-Intelligence Agents in Prediction Markets," A. Othman, in *7th International Conference on Autonomous Agents and Multiagent Systems*, 2008.

Quang Duong — Spring '06- Spring '07

- Supported in part by Harvard College Research Program.
- Summer project led to "Chain: A dynamic double auction framework" in *Journal of Artificial Intelligence Research* 2007, to appear.
- A.B. thesis *Adaptive Online Mechanism Design in Single-Valued Domains: An Ironing Approach*, in computer science and economics.
- Work led to paper "An ironing-based approach to adaptive online mechanism design in single-valued domains" in *22nd National Conference on Artificial Intelligence (AAAI'07).*
- Ph.D. in Computer Science, University of Michigan.

Haoqi Zhang — Summer '05- Spring '07

- Summer Project on *Clock-proxy auctions for the airport slot auctions.*
- A.B. thesis *Policy Teaching through Reward Function Learning* in computer science and economics, awarded **Thomas Temple Hoopes Prize** for outstanding undergraduate work.
- Honorable Mention, CRA Outstanding Undergraduate Award '07.
- Course development for AM 121, Summer '07.
- Recipient of an NSF Graduate Fellowship
- Recipient of an NDSEG Graduate Fellowship

Qicheng Ma — Fall '05- Spring '06

- A.B. thesis *Utility-Based Bandwidth Allocation and Link Scheduling in Wireless Networks: Linear Programming and Market-Oriented Approaches* (co-advised with Matt Welsh) and received highest honors in computer science.
- Work led to paper in *1st International Workshop on Agent Technology for Sensor Networks (ATSN-07).*
- SM in Computer Science at Stanford University

R. Kang-Xing Jin — Fall '05- Spring '06

- A.B. thesis *Leveraging Bidder Behavior to Identify Categories of Substitutable and Complementary Goods on eBay* in computer science (co-advised with Patrick Wolfe) and received highest honors.
- Work led to paper in *1st Workshop on Plan, Activity and Intent Recognition (PAIR'07)* at AAAI'07.
- Facebook

John Lai — Fall '04- Spring '05

- A.B. thesis *Accelerated Implementations of the Ascending Proxy Auction* in computer science and mathematics, awarded **Thomas Temple Hoopes Prize** for outstanding undergraduate work and received highest honors.

Rui Dong — Fall '04- Spring '05

- A.B. thesis *Combinatorial Clock Auction for Airport Time Slots: An Agent-Based Analysis* in computer science and economics.
- Honorable Mention, CRA Outstanding Undergraduate Award '05.

Dimah Yanovsky — Summer'03- Spring '05

- Supported in part by Harvard College Research Program.
- Work led to paper "Approximately efficient online mechanism design" in *18th Annual Conference on Neural Information Processing Systems (NIPS'04)*.
- A.B. thesis *Uniform Sampling in a Wireless Network Via a Market Inspired Method* in computer science (co-advised with Matt Welsh).

Kyna Fong — Fall '02- Spring '03

- A.B. thesis *Multi-Stage Information Acquisition in Auctions* in applied mathematics and economics, awarded **Thomas Temple Hoopes Prize** for outstanding undergraduate work and received highest honors.
- Assistant Professor of Economics, Stanford University.

Grant Schoenebeck — Fall '02- Spring '03

- Supported in part by Harvard College Research Program.
- Work led to paper "Anytime VCG-Based mechanisms" in *19th National Conference on Artificial Intelligence (AAAI'04)*.
- Honorable mention, CRA Outstanding Undergraduate Award '04.
- Ph.D. in computer science, UC Berkeley. Professor of computer science, U. Michigan.

Aditya Sunderam — Summer '02

- Supported in part by Harvard College Research Program.
- Work led to short paper "Preference elicitation in proxied multiattribute auctions" in *4th ACM Conference on Electronic Commerce (EC'03)*.
- Runner-up, CRA Outstanding Undergraduate Award '05.
- Ph.D. in economics, Harvard. Professor of Business Administration, HBS.

Additional Research Advising

- Supervised research of Luca D'Amico-Wong on no-regret and reinforcement learning for games, Summer and Fall, 2022.
- Supervised research of Ben Altschuler on automated market makers, 2021-22.
- Supervised research of David Assaraf on machine learning for econometrics, 2021-22.
- Supervised research of Matt Fu on multi-agent reinforcement learning, 2021-22.
- Supervised research of Brian Chu and Bill Zhang on imitation learning, Fall 2019-Spring 2020.
- Supervised research of Rithvik Rao and Mike Neuder on proof-of-work and proof-of-stake modeling, Summer 2019 - Spring 2021 (co-supervised with Daniel Moroz).
- Organized reading group on deep reinforcement learning, Fall 2019.
- Supervised research of Kojin Oshiba on deep learning for econometrics, Fall 2017-Spring 2019.
- Supervised research of Haruku Uchida on fairness and machine learning, Spring 2017.
- Supervised research of Jonathan Iyandemye on fairness and machine learning, Fall 2017.
- Supervised research of Christian Ondaatje on digital resource markets (with Eric Mibuari), Fall 2017.
- Supervised research of Noah Golowich on Deep learning for Mechanism Design, '16-17.
- Supervised research of Kendall Sherman on Elicitation and Matching, Fall '14.
- Supervised research of Keyon Vafa on Computational social science, Fall '14.
- Supervised research of Dakota Diggs and Peter Wei on Computational poker, Spring '14.
- Supervised research of Nitish Lakhanpal and Ted An, Summer '10.
- Co-supervised with Haoqi Zhang an independent study of Dylan Lake and Eric Huang on computational environment design, Summer '09.
- Advised CS thesis of Ivo Parashkevov '07, *Stochastic FP-Q for Stochastic Games.*
- Advised CS/EC thesis of Jimmy Sun '07, *The Role of Value of Information Based Meta-reasoning in Adaptive Sponsored Search Auctions.*
- Supervised independent study of Brad Diephuis, Jie Tang and Mark Yetter on *The Egg project*, Summer '06.
- Advised CS thesis of Aditya Sanghvi '06, *An Online, Budget-Constrained Truthful Mechanism.*
- Supervised independent study of Aaron Bernstein on *Faithful distributed constraint optimization*, Summer '06.

- Co-advised CS/Psych thesis of Luke Hedrick '05, *A Computational Model of the role of affect in decision-making: Learnability of approach avoidance behaviors by simple agents*, with Daniel Gilbert.
- Advised AM thesis of Ryan Davies '05, *Distributed Generalized Vickrey Auctions Based on the Dantzig-Wolfe and Benders Decomposition Methods for Linear Programs.*
- Supervised independent study of Aaron Roth on *Community Detection for eBay Trading Networks*, Summer '05. Currently a Ph.D. student in computer science at CMU.
- Supervised independent study of Ariel Kleiner on *Fictious play for Nash equilibria*, Fall '05. Currently a Ph.D. student at U.C. Berkeley.
- Advised CS thesis of Ed Naim '04, *Consensus Mechanisms: Anytime Strategyproof Mechanisms for Combinatorial Auctions.*
- Advised CS thesis of Andrew Bosworth '04, *DRATS: Dynamically Re-Allocated Team Search.*
- Supervised independent study of D.J. Lee on *Faithful distributed optimization*, Summer '04.
- Supervised independent study of Saurabh Sanghvi on *Hard to manipulate combinatorial auctions*, Summer '03.
- Advised CS thesis of David Krych '03, *Calculation and Analysis of Nash Equilibria of Vickrey-Based Payment Rules for Combinatorial Exchanges.*
- Co-advised CS thesis of Richard Kim '02 on *The Appeal of Randomness: Introducing a Social Commitment Policy Based on Probabilistic Determination* with Barbara Grosz. Received highest honors.

Other Undergraduate Activities

- Harvard Trading Agent Competition Teams:
  - Rui Dong, Wilfred Yeung, Terry Tai (*HarTac*), Summer '03
  - David Hammer, Qicheng Ma, Lukasz Strozek, and Hassan Sultan (*Intuition*), Summer '04
  - Evan Sprecher and Ariel Kleiner (*Remix*), Summer '05.

Visitors Hosted

- Paul Kattuman (Judge School, University of Cambridge), Spring 2022.
- Yuqing Kong (Peking University), January 2020.
- Yusuke Hara (Tokohu University), Feb. '17 - Mar. '17.
- Christos Dimitrakakis (Chalmers and Lille), May '16 - Dec. '16, Aug. '17-Jul. '18, June '19.
- Shivani Agarwal (IISc. Bangalore), Sept. - Dec'14.
- Jason Hartline (Northwestern University), June '14 - May '15.

- Nicole Immorlica (Microsoft New England and Northwestern), Sept. '13- Dec. '13.
- Craig Boutilier (University of Toronto), Sep. '10.
- Shaheen Fatima (Loughborough University), Apr. '09.
- Jonathan Bredin (Colorado College), Aug. '04- Apr. '05.
- Takayuki Ito (Nagoya Institute of Technology), Mar. '05- Sep. '05
- Johan Pouwelse (Deflt University of Technology), Jun. '07- Aug. '07, July '08- Aug. '08

Books

[1] David C. Parkes and Sven Seuken. *Algorithmic Economics: A Design Approach.* Cambridge University Press, Spring 2024.

Conference Papers

All of the conference proceedings listed below are heavily refereed.

[1] Yaniv Yacoby, John Girash, and David C. Parkes. Empowering first-year computer science ph.d. students to create a culture that values community and mental health. In *Technical Symposium on Computer Science Education SIGCSE*, pages 694–700, 2023.

[2] Jamelle Watson-Daniels, David C. Parkes, and Berk Ustun. Predictive multiplicity in probabilistic classification. In *Proceedings of the Association for the Advancement of Artificial Intelligence Conference AAAI*, pages 10306–10314, 2023.

[3] Xintong Wang, Gary Qiurui Ma, Alon Eden, Clara Li, Alexander Trott, Stephan Zheng, and David C. Parkes. Platform behavior under market shocks: A simulation framework and reinforcement-learning based study. In *Proceedings of the Web Conference WWW*, pages 3592–3602, 2023.

[4] Matheus Venturyne Xavier Ferreira and David C. Parkes. Credible decentralized exchange design via verifiable sequencing rules. In *Proceedings of the 55th Annual ACM Symposium on Theory of Computing STOC*, pages 723–736, 2023.

[5] Zhun Deng, He Sun, Steven Wu, Linjun Zhang, and David C. Parkes. Reinforcement learning with stepwise fairness constraints. In *26th International Conference on Artificial Intelligence and Statistics AISTATS*, pages 10594–10618, 2023.

[6] Matthias Gerstgrasser, Rakshit Trivedi, and David C. Parkes. Crowdplay: Crowdsourcing human demonstrations for offline learning. In *Proceedings of the International Conference on Learning Representations, ICLR*, 2022.

[7] Mira Finkelstein, Nitsan Levy Schlot, Lucy Liu, Yoav Kolumbus, David C. Parkes, Jeffrey S. Rosenschein, and Sarah Keren. Explainable reinforcement learning via model transforms. In *Proceedings of the Conference on Neural Information Processing Systems NeurIPS*, 2022.

[8] Zhou Fan, Francisco J. Marmolejo Cossío, Ben Altschuler, He Sun, Xintong Wang, and David C. Parkes. Differential liquidity provision in uniswap v3 and implications for contract design. In *Proceedings of the 4th ACM International Conference on AI in Finance ICAIF*, pages 9–17, 2022.

[9] Zhou Fan, Francisco J. Marmolejo Cossío, Ben Altschuler, He Sun, Xintong Wang, and David C. Parkes. Differential liquidity provision in uniswap v3 and implications for contract design. In *Proceedings of the 4th ACM International Conference on AI in Finance ICAIF*, pages 9–17, 2022.

[10] Mark York, Munther Dahleh, and David C. Parkes. Eliciting social knowledge for creditworthiness assessment. In *Proc. 17th Conference on Web and Internet Economics*, pages 428–445, 2021.

[11] Rose E. Wang, Sarah A. Wu, James A. Evans, Joshua B. Tenenbaum, David C. Parkes, and Max Kleiman-Weiner. Too many cooks: Coordinating multi-agent collaboration through inverse planning. In *Proceedings of the 19th International Conference on Autonomous Agents and Multiagent Systems, AAMAS*, pages 2032–2034, 2021.

[12] Paul Tylkin, Goran Radanovic, and David C. Parkes. Learning robust helpful behaviors in two-player cooperative Atari environments. In *AAMAS '21: 20th International Conference on Autonomous Agents and Multiagent Systems,*, pages 1686–1688, 2021.

[13] Sophie Hilgard, Nir Rosenfeld, Mahzarin R. Banaji, Jack Cao, and David C. Parkes. Learning representations by humans. In *Proceedings of the ICML 2021*, pages 4227–4238, 2021.

[14] Vincent Conitzer, Zhe Feng, David Parkes, and Eric Sodomka. Welfare-preserving epsilon-BIC to BIC transformation with negligible revenue loss. In *Proc. 17th Conference on Web and Internet Economics*, pages 76–94, 2021.

[15] Gianluca Brero, Alon Eden, Matthias Gerstgrasser, David C. Parkes, and Duncan Rheingans-Yoo. Reinforcement learning of sequential price mechanisms. In *Thirty-Fifth AAAI Conference on Artificial Intelligence, AAAI*, pages 5219–5227, 2021.

[16] Rose E. Wang, Sarah A. Wu, James A. Evans, Joshua B. Tenenbaum, David C. Parkes, and Max Kleiman-Weiner. Too many cooks: Coordinating multi-agent collaboration through inverse planning. In *Proceedings 42nd Annual Meeting of the Cognitive Science Society*, pages 889–895, 2020.

[17] Nir Rosenfeld, Aron Szanto, and David C. Parkes. A kernel of truth: Determining rumor veracity on Twitter by diffusion pattern alone. In *WWW '20: The Web Conference 2020*, pages 1018–1028, 2020.

[18] Nir Rosenfeld, Anna Hilgard, Sai Srivatsa Ravindranath, and David C. Parkes. From predictions to decisions: Using lookahead regularization. In *Annual Conference on Neural Information Processing Systems 2020, NeurIPS*, 2020.

[19] Michael Neuder, Daniel J. Moroz, Rithvik Rao, and David C. Parkes. Selfish behavior in the tezos proof-of-stake protocol. In *CES '20: Cryptoeconomic Systems Conference*, 2020.

[20] Michael Neuder, Daniel J. Moroz, Rithvik Rao, and David C. Parkes. Defending against malicious reorgs in tezos proof-of-stake. In *AFT '20: 2nd ACM Conference on Advances in Financial Technologies*, pages 46–58. ACM, 2020.

[21] Daniel J. Moroz, Daniel J. Aronoff, Neha Narula, and David C. Parkes. Double-spend counterattacks: Threat of retaliation in proof-of-work systems. In *CES '20: Cryptoeconomic Systems Conference*, 2020.

[22] Debmalya Mandal, Goran Radanovic, and David C. Parkes. The effectiveness of peer prediction in long-term forecasting. In *Proc. 34th AAAI Conference on Artificial Intelligence, (AAAI'20)*, 2020.

[23] Hongyao Ma, Reshef Meir, David C. Parkes, and Elena Wu-Yan. Penalty bidding mechanisms for allocating resources and overcoming present-bias. In *Proceedings of the 19th International Conference on Autonomous Agents and Multiagent Systems, AAMAS*, pages 807–815, 2020.

[24] Sarah Keren, Haifeng Xu, Kofi Kwapong, David Parkes, and Barbara Grosz. Information shaping for enhanced goal recognition of partially-informed agents. In *Proc. 34th AAAI Conference on Artificial Intelligence, (AAAI'20)*, 2020.

[25] Sarah Keren, Sara Bernardini, Kofi Kwapong, and David C. Parkes. Reasoning about plan robustness versus plan cost for partially informed agents. In *Proceedings of the 17th International Conference on Principles of Knowledge Representation and Reasoning, KR 2020*, pages 550–559, 2020.

[26] Zhe Feng, David C. Parkes, and Haifeng Xu. The intrinsic robustness of stochastic bandits to strategic manipulation. In *Proceedings of the 37th International Conference on Machine Learning, ICML*, pages 3092–3101, 2020.

[27] Hau Chan, David C. Parkes, and Karim R. Lakhani. The price of anarchy of self-selection in tullock contests. In *Proceedings of the 19th International Conference on Autonomous Agents and Multiagent Systems, AAMAS*, pages 1795–1797, 2020.

[28] Berk Ustun, Yang Liu, and David C. Parkes. Fairness without harm: Decoupled classifiers with preference guarantees. In *Proc. 36th International Conference on Machine Learning, (ICML'19)*, pages 6373–6382, 2019.

[29] Jack Serrino, Max Kleiman-Weiner, David C. Parkes, and Josh Tenenbaum. Finding friend and foe in multi-agent games. In *Proc. 32nd Annual Conf. on Neural Information Processing Systems, (NeurIPS19)*, pages 1249–1259, 2019.

[30] Nripsuta Saxena, Karen Huang, Evan DeFilippis, Goran Radanovic, David Parkes, and Yang Liu. How do fairness definitions fare? Examining public attitudes towards algorithmic definitions of fairness. In *Proceedings of AI Ethics and Society (AIES'19)*, 2019.

[31] Duncan Rheingans-Yoo, Scott Duke Kominers, Hongyao Ma, and David C. Parkes. Ridesharing with driver location preferences. In *Proc. 28th Int. Joint Conf. on Artificial Intelligence, (IJCAI'19)*, pages 557–564, 2019.

[32] Goran Radanovic, Rati Devidze, David C. Parkes, and Adish Singla. Learning to collaborate in Markov decision processes. In *Proc. 36th International Conference on Machine Learning, (ICML'19)*, pages 5261–5270, 2019.

[33] Hongyao Ma, Reshef Meir, David C. Parkes, and James Zou. Contingent payment mechanisms for resource utilization. In *Proc. 18th International Conference on Autonomous Agents and MultiAgent Systems (AAMAS'19)*, pages 422–430, 2019.

[34] Hongyao Ma, Fei Fang, and David C. Parkes. Spatial-temporal pricing for ridesharing platforms. In *Proc. 20th ACM Conference on Economics and Computation (EC'19)*, page 583, 2019.

[35] Paul Duetting, Zhe Feng, Harikrishna Narasimhan, David C. Parkes, and Sai Srivatsa Ravindranath. Optimal auctions through deep learning. In *Proc. 36th International Conference on Machine Learning, (ICML'19)*, pages 1706–1715, 2019.

[36] Christos Dimitrakakis, Yang Liu, David C. Parkes, and Goran Radanovic. Bayesian fairness. In *Proceedings of the 33rd AAAI Conference on Artificial Intelligence (AAAI'19)*, 2019.

[37] Haris Aziz, Hau Chan, Barton E. Lee, and David C. Parkes. Capacity constrained facility location problem. In *Proc. 15th Int. Conf. on Web and Internet Economics, (WINE'19)*, page 336, 2019.

[38] Jean Pouget-Abadie, Vahab S. Mirrokni, David C. Parkes, and Edoardo M. Airoldi. Optimizing cluster-based randomized experiments under monotonicity. In *Proceedings of the 24th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, KDD*, pages 2090–2099, 2018.

[39] Reshef Meir and David C. Parkes. Playing the wrong game: Bounding externalities in diverse populations of agents. In *Proceedings of the 17th International Conference on Autonomous Agents and MultiAgent Systems, AAMAS*, pages 86–94, 2018.

[40] Hongyao Ma, Reshef Meir, and David C. Parkes. Social choice with non quasi-linear utilities. In *Proceedings of the 2018 ACM Conference on Economics and Computation*, page 49, 2018.

[41] Noah Golowich, Harikrishna Narasimhan, and David C. Parkes. Deep learning for multi-facility location mechanism design. In *Proceedings of the Twenty-Seventh International Joint Conference on Artificial Intelligence, IJCAI*, pages 261–267, 2018.

[42] Zhe Feng, Harikrishna Narasimhan, and David C. Parkes. Deep learning for revenue-optimal auctions with budgets. In *Proceedings of the 17th International Conference on Autonomous Agents and MultiAgent Systems (AAMAS'18)*, pages 354–362, 2018.

[43] Rediet Abebe, Jon M. Kleinberg, David C. Parkes, and Charalampos E. Tsourakakis. Opinion dynamics with varying susceptibility to persuasion. In *Proceedings of the 24th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, KDD*, pages 1089–1098, 2018.

[44] David C. Parkes, Paul Tylkin, and Lirong Xia. Thwarting Vote Buying Through Decoy Ballots. In *Proc. 26th International. Joint Conference on Artificial Intelligence (IJCAI'17)*, pages 3784–3790, 2017.

[45] David C. Parkes, Paul Tylkin, and Lirong Xia. Thwarting Vote Buying Through Decoy Ballots. In *Proc. 16th Conf. on Autonomous Agents and Multiagent Systems (AAMAS'17)*, pages 1679–1681, 2017.

[46] Hongyao Ma, David C. Parkes, and Valentin Robu. Generalizing Demand Response Through Reward Bidding. In *Proc. 16th Conf. on Autonomous Agents and Multiagent Systems (AAMAS'17)*, pages 60–68, 2017.

[47] Christos Dimitrakakis, David C. Parkes, Goran Radanovic, and Paul Tylkin. Multi-View Decision Processes: The Helper-AI Problem. In *Proc. 30th Advances in Neural Information Processing Systems (NIPS'17)*, pages 5449–5458, 2017.

[48] Arpit Agarwal, Debmalya Mandal, David C. Parkes, and Nisarg Shah. Peer Prediction with Heterogeneous Users. In *Proc. Eighteenth ACM Conference on Economics and Computation, (EC'17)*, pages 81–98, 2017.

[49] Rediet Abebe, Jon M. Kleinberg, and David C. Parkes. Fair Division via Social Comparison. In *Proc. 16th Conf. on Autonomous Agents and Multiagent Systems (AAMAS'17)*, pages 281–289, 2017.

[50] Panos Toulis and David C. Parkes. Long-term causal effects via behavioral game theory. In *Proceedings of the Annual Conference on Neural Information Processing Systems (NIPS '16)*, 2016.

[51] Victor Shnayder and David C. Parkes. Practical Peer Prediction for Peer Assessment. In *Proc. of the 4th AAAI Conference on Human Computation and Crowdsourcing (HCOMP '16)*, 2016.

[52] Victor Shnayder, Rafael Frongillo, and David C. Parkes. Measuring Performance Of Peer Prediction Mechanisms Using Replicator Dynamics. In *Proc. of the 25th International Joint Conference on Artificial Intelligence (IJCAI'16)*, pages 2611–2617, 2016.

[53] Victor Shnayder, Arpit Agarwal, Rafael Frongillo, and David C. Parkes. Informed Truthfulness in Multi-Task Peer Prediction. In *Proc. of the 17th ACM Conf. on Economics and Computation (EC '16)*, pages 179–196, 2016.

[54] Harikrishna Narasimhan and David C. Parkes. A General Statistical Framework for Designing Strategy-proof Assignment Mechanisms. In *Proc. of the Conference on Uncertainty in Artificial Intelligence (UAI'16)*, 2016.

[55] Harikrishna Narasimhan, Shivani Agarwal, and David C. Parkes. Automated Mechanism Design without Money via Machine Learning. In *Proc. of the 25th International Joint Conference on Artificial Intelligence (IJCAI'16)*, pages 433–439, 2016.

[56] Debmalya Mandal and David C. Parkes. Correlated Voting. In *Proc. of the 25th International Joint Conference on Artificial Intelligence (IJCAI'16)*, pages 366–372, 2016.

[57] Hongyao Ma, Valentin Robu, Na Li, and David C. Parkes. Incentivizing Reliability in Demand-Side Response. In *Proc. of the 25th International Joint Conference on Artificial Intelligence (IJCAI'16)*, pages 352–358, 2016.

[58] Hongyao Ma, Reshef Meir, and David C. Parkes. Social Choice for Agents with General Utilities. In *Proc. of the 25th International Joint Conference on Artificial Intelligence (IJCAI'16)*, pages 345–351, 2016.

[59] Brandon K. Liu, David C. Parkes, and Sven Seuken. Personalized Hitting Time for Informative Trust Mechanisms Despite Sybils. In *Proc. of the 15th International Conference on Autonomous Agent and Multiagent Systems (AAMAS'16)*, pages 1124–1132, 2016.

[60] Paul Duetting, Felix Fischer, and David C. Parkes. Truthful Outcomes from Non-Truthful Position Auctions. In *Proc. of the 17th ACM Conf. on Economics and Computation (EC '16)*, page 813, 2016.

[61] James Zou, Reshef Meir, and David C. Parkes. Strategic Voting Behavior in Doodle Polls. In *Proc. 18th ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2015)*, pages 464–472, 2015.

[62] Panos Toulis, David C. Parkes, Elery Pfeffer, and James Zou. Incentive-Compatible Experimental Design. In *Proceedings 16th ACM Conference on Economics and Computation (EC '15)*, pages 285–302, 2015.

[63] David Parkes, Chrisopher Thorpe, and Wei Li. Achieving Trust without Disclosure: Dark Pools and a Role for Secrecy-Preserving Verification. In *Proceedings of the 3rd Conference on Auctions, Market Mechanisms and Their Applications (AMMA'15)*, 2015.

[64] Harikrishna Narasimhan, David C. Parkes, and Yaron Singer. Learnability of Influence in Networks. In *Proceedings of the 29th Annual Conference on Neural Information Processing Systems (NIPS 2015)*, pages 3168–3176, 2015.

[65] Reshef Meir and David C. Parkes. On Sex, Evolution, and the Multiplicative Weights Update Algorithm. In *Proceedings of the 14th Int. Conf. on Autonomous Agents and Multiagent Systems (AAMAS-15)*, pages 929–937, 2015.

[66] Reshef Meir and David C. Parkes. Congestion Games with Distance-Based Strict Uncertainty. In *Proc. Twenty-Ninth AAAI Conference on Artificial Intelligence (AAAI-15)*, pages 986–992, 2015.

[67] Hongyao Ma, Reshef Meir, David C. Parkes, and James Zou. Are you Going to Do That? Contingent-Payment Mechanisms to Improve Coordination. In *Proceedings of the3rd Conference on Auctions, Market Mechanisms and Their Applications (AMMA'15)*, 2015.

[68] Hossein Azari Soufiani, David C. Parkes, and Lirong Xia. Computing Parametric Ranking Models via Rank-Breaking. In *Proceedings of the International Conference on Machine Learning (ICML 2014)*, pages 360–368, 2014.

[69] Hossein Azari Soufiani, Denis Charles, Max Chickering, and David C. Parkes. Approximating the Shapley Value via Multi-Issue Decompositions. In *Proceedings of the 13th International Conference on Autonomous Agents and Multiagent Systems (AAMAS-14)*, pages 1209–1216, 2014.

[70] Victor Shnayder, Vikas Kawadia, Jeremy Hoon, and David C. Parkes. Truthful Prioritization for Dynamic Bandwidth Sharing. In *Proceedings 15th ACM Int. Symp. on Mobile Ad Hoc Networking and Computing (MobiHoc 2014)*, pages 235–244, 2014.

[71] Sven Seuken and David C. Parkes. Sybil-proof Accounting Mechanisms with Transitive Trust. In *Proceedings of the 13th International Conference on Autonomous Agents and Multiagent Systems (AAMAS-14)*, pages 205–212, 2014.

[72] Paul Duetting, Felix Fischer, and David C. Parkes. Expressiveness and Robustness of First-Price Position Auctions. In *Proc. 15th ACM Conference on Economics and Computation (EC'14)*, pages 57–74, 2014.

[73] Hossein Azari Soufiani, David C. Parkes, and Lirong Xia. A Statistical Decision-Theoretic Framework for Social Choice. In *Proc. Advances in Neural Information Processing Systems 27 (NIPS 2014)*, pages 3185–3193, 2014.

[74] James Zou, Daniel Hsu, David C. Parkes, and Ryan Adams. Contrastive Learning Using Spectral Methods. In *Proceedings of the Annual Conference on Neural Information Processing Systems (NIPS' 13)*, pages 2238–2246, 2013.

[75] Haoqi Zhang, Eric Horvitz, and David C. Parkes. Automated Workflow Synthesis. In *Proceedings of the Twenty-Seventh AAAI Conference on Artificial Intelligence (AAAI-13)*, 2013.

[76] Jens Witkowski, Yoram Bachrach, Peter Key, and David C. Parkes. Dwelling on the Negative: Incentivizing Effort in Peer Prediction. In *Proceedings of the 1st AAAI Conference on Human Computation and Crowdsourcing (HCOMP'13)*, 2013.

[77] Hossein Azari Soufiani, Hansheng Diao, Zhenyu Lai, and David C. Parkes. Generalized Random Utility Models with Multiple Types . In *Proceedings of the Annual Conference on Neural Information Processing Systems (NIPS 2013)*, pages 73–81, 2013.

[78] Hossein Azari Soufiani, William Chen, David C. Parkes, and Lirong Xia. Generalized Method-of-Moments for Rank Aggregation. In *Proceedings of the Annual Conference on Neural Information Processing Systems (NIPS 2013)*, pages 2706–2714, 2013.

[79] Valentin Robu, David C. Parkes, Takayuki Ito, and Nicholas R. Jennings. Efficient Interdependent Value Combinatorial Auctions with Single Minded Bidders. In *Proceedings of the 23rd International Joint Conference on Artificial Intelligence (IJCAI 2013)*, pages 339–345, 2013.

[80] David C. Parkes and Ariel D. Procaccia. Dynamic Social Choice with Evolving Preferences. In *Proceedings of the Twenty-Seventh AAAI Conference on Artificial Intelligence (AAAI-13)*, 2013.

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Expert Consulting

- Founder, EconCS, LLC, 2019
- Subject matter expert, Keystone Strategy, 2014- present
- Expert witness, including expert reports, deposition and trial testimony, in areas related to the digital economy, artificial intelligence, and data science, 2005- present
- Consultant, Chainlink, Inc, November 2020-January 2023
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- Technical advisor, Cmorq, Inc., 2018-September 2023
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- Technical advisor and Co-founder, Yeast, LLC, 2011- September 2023
- Technical advisor and Co-founder, Nift networks, Inc., 2014- September 2023
- Member of Brain trust, Cogitai, Inc. 2016-2019.
- Scientific advisor, Curoverse, Inc., 2012- 2018.
- Scientific Advisor, Nanigans, Inc., 2011-2017
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