Curriculum Vitae
Itai Ashlagi

Contact Information

Sloan School of Management, E62-577
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Positions

2010-current Assistant Professor of Operations Management at Sloan School of Management, MIT.

2008-2010 Postdoctoral fellow at Harvard Business School; advised by Alvin Roth.

2009-2010 Visiting researcher in Microsoft Research, New England.

Education

2005-2008 PhD in Operations Research, Technion - Israel Institute of Technology; advised by Dov Monderer and Moshe Tennenholtz.

2003-2005 M.Sc.in Operations Research, Technion - Israel Institute of Technology (summa cum laude).

1996-1999 B.A. in Mathematics and Computer Science 1999, Haifa University (magna cum laude).

Industrial Experience

2000-2002: Software engineer, Wanway Technologies, Herztliya.

1999-2000: Software engineer, Comverse, Atidim, Tel-Aviv.

Research Interests

Mechanism design, Market design, Matching, Game theory, Operations in marketplaces.

Grants and Awards

-Second prize in the INFORMS Junior Faculty Interest Group best paper competition, 2014.
-Franz Edelman Laureate 2014.
-Best paper award in Public, Programs, Services & Needs (INFORMS), 2013.
-National Science Foundation CAREER award for the proposal *Novel designs for kidney exchange and other markets, in the intersection of OR, Econ and CS*, 2013.
-Best paper award in Public Programs, Services and Needs, INFORMS, 2013.
-The Terasaki Medical Innovation Award, 2012.
-National Science Foundation Grant for proposal *Collaborative Research on Kidney Exchange*, 2011.
-Ferry Fund grant, 2011.
-Outstanding paper award in the ACM Conference on Economics and Computation (EC), 2009.
-Special Aaron and Miriam Gutwirth Memorial Scholarship for research excellence, 2007.

Theses

-PhD Thesis: Pre-Bayesian Games, Technion, Israel, 2008.
-M.Sc. Thesis: On the Value of Correlation, Technion, Israel, 2005.

Students supervision

-Ross Anderson, OR center, PhD, graduated in 2014 (won the best ORC student paper award).
-Peng Shi, OR center, PhD, expected graudation in 2016 (won the best ORC student paper award).
-Maximillien Burq, OR center, PhD, (expected graudation in 2019).

Working Papers

-Ashlagi I., P. Shi, Optimal allocated design without money: an engineering approach, 2014. *Minor Revision, **Management Science***, (extended abstract in EC 2014).

First place in 2013 INFORMS Section on Public Programs, Services and Needs (SPPSN) best paper competition.

-Ashlagi I., P. Jaillet, V. Manshadi, Kidney Exchange in Dynamic Sparse Heterogenous Pools, 2013. *Revise and Resubmit, **Management Science***, (extended abstract in EC 2013).

-Ashlagi I., D. Gamarnik, M.A. Rees, A.E. Roth, The Need for (Long) Chains in Kidney Exchange, 2012. *Revise and Resubmit, **Operations Research***.

-Anderson R.,Ashlagi I., D. Gamarnik, Y. Kanoria, A Dynamic model for barter exchange, 2014. *Submitted to Operations Research.* (extended abstract in SODA 2015)

-Ashlagi I., J. Leshno, Y. Kanoria, Unbalanced matching markets: the stark effect of competition, 2014. *Revise and Resubmit, **Journal of Political Economy***. (extended abstract in EC 2013).

Second prize in the INFORMS Junior Faculty Interest Group (JFIG) best paper competition, 2014.

-Ashlagi I., M. Braverman, A. Hassidim, Ascending Unit Demand Auctions with Budget Limits, 2009, (technical report).

Papers in Refereed Journals

-Ashlagi I., P. Shi, Improving community cohesion in school choice via correlated-lottery implementation, forthcoming in *Operations Research*, 2014.

-Ashlagi I., M. Braverman, A. Hassidim, Stability in large matching markets with complementarities, forthcoming in *Operations Research*, 2014 (previously circulated as "Matching with Couples Revisited". Extended abstract appears in EC 2011).

-Ashlagi I., A.E. Roth, Free riding and participation in large scale, multi-hospital kidney exchange, forthcoming in *Theoretical Economics*, 2014 (extended abstract in EC 2011).

-Ashlagi I., F. Fischer, I. A. Kash, A. D. Procaccia Mix and match, *Games and Economic Behavior*, 2013 (extended abstract in EC 2010).

-Ashlagi I., D.S. Gilchrist, A.E. Roth, M.A. Rees, NEAD chains in transplantation, *American Journal of Transplantation*, December, 11,2780-2781, 2011.

-Ashlagi I., S. Dobzinski, R. Lavi, An optimal lower bound for anonymous scheduling mechanisms, *Mathematics of Operations Research*, 37(2), 244-258, 2012.

Outstanding paper award in the ACM conference of Electronic Commerce (EC), 2009.

-Ashlagi I., F. Klijn, Manipulability in matching markets: conflict and coincidence of interests, *Social Choice and Welfare*, 39(1), 23-33, 2012.

-Ashlagi I., D.S. Gilchrist, A.E. Roth, M.A. Rees, Nonsimultaneous chains and dominos in kidney paired donation - revisited, *American Journal of Transplantation*, 11(5), 984–994, 2011.

-Ashlagi, I., B. Klaus, E. Karagozoglu, A noncooperative support for equal division in estate division, *Mathematical Social Sciences*, 63, 228-233,2012.

-Ashlagi I., D. Monderer, M. Tennenholtz, Simultaneous ad auctions, *Mathematics of Operations Research*, 36(1), 1-13, 2011.

-Ashlagi I., Shigehiro Serizawa, Characterizing Vickrey allocation rule by anonymity, *Social Choice and Welfare*, 28(3), 531-542,2012.

-Ashlagi I., M. Braverman, A. Hassidim, Dov Monderer, Monotonicity and implementability, *Econometrica*, 78(5), 1749-1772, 2010.

-Ashlagi I., M. Braverman, A. Hassidim, R. Lavi, M.Tennenholtz, Position auctions with budgets: existence and uniqueness, *B.E. Journal of Theoretical Economics - Advances*, 10(1), 2010.

-Ashlagi I., D. Monderer, M. Tennenholtz, Mediators in position auctions, *Games and Economic Behavior*, 67(1), 2-21, 2009.

-Ashlagi I., D. Monderer, M. Tennenholtz, Two-Terminal routing games with unknown active player, *Artificial Intelligence Journal* , 173(15), 1441-1455, 2009

-Ashlagi I., D. Monderer, M. Tennenholtz, On the value of correlation, *Journal of Artificial Intelligence Research*, Vol 33, p. 575-613, 2008. A shorter version appears in the proceedings UAI 2005.

Invited Publications

-Anderson R., I. Ashlagi, D. Gamarnik, M. Rees, A.E. Roth, T. Sonmez, M.U. Unver, Kidney exchange and the alliance for paired donation: operations research changes the way kidneys are transplanted, forthcoming in *Interfaces*, [Franz Edelman finalist paper, 2014].

-Ashlagi I., A.E. Roth, New challenges in multi-hospital kidney exchange, *American Economic Review, Papers and Proceedings*, May, 102(3), 354–359, 2012

Papers in Refereed Conference Proceedings (not appearing above)

-Ashlagi I., B. Lucier, M. Tennenholtz, Equilibria of Online Scheduling Algorithms, AAAI 2013.

-Ashlagi I., P. Krysta, M. Tennenholtz, Social Context Games, WINE 2008.

-Ashlagi I., A. Klinger, M. Tennenholtz, K-NCC: Stability against Group Deviations in Non-Cooperative Computation, WINE 2007.

-Ashlagi I., D. Monderer, M. Tennenholtz, Learning Equilibrium in Congestion Games, AAAI 2007.

-Ashlagi I., D. Monderer, M. Tennenholtz, Routing Games with an Unknown Set of Active Players, AAMAS 2007.

-Ashlagi I., D. Monderer, M. Tennenholtz, Robust Learning Equilibrium, UAI 2006.

-Ashlagi I., D. Monderer, M. Tennenholtz, Resource Selection Games with Unknown Number of Players, AAMAS 2006.

Public Activities

-Organizer of the 10th Ad Auctions workshop , 2014, Palo alto, CA, 2014.

-Committee for the best paper award for EC 2014, Chair of the best paper award for SPSSN INFORMS 2014, Judge in the best paper award for Doing good with good OR (INFORMS) 2014.

-Chair of the Design, Optimization and Algorithms committee for the kidney paired donation in the United Organ Sharing Network (UNOS).

-Served as in the Implementation group for Kidney Paired Donation, Consensus Conference on Kidney Paired Donation 2012.

-Helped in policy design for the Alliance Paired Donation (APD) and the National Kidney Registry (NKR).

-Organizer of the conference Frontiers in Market Design, Switzerland, 2012.

-Mini course on matching and market design in a summer school on Algorithmic Economics for PhD students at CMU, 2012.

-Organizer of a workshop about "Matching and Market Design" in Electronic Commerce (EC), 2011.

-Lectures in the 25th summber school in Economic Eheory (Matching and Market Design), Institute for advanced studies, Hebrew University, 2014.

-Organizer of the 10th Ad Auctions workshop, 2014.

-Senior program committee for EC 13,14.

-Program Committee for: EC 13,14 (senior program committee), EC 09,10,12,13, SAGT 10,14, MSOM 2014,2013,2012, WINE 2013, AAMAS 08, 09, 10,12, AAAI, 10,11 AMMA 09,11, Ad Auctions Workshop 10, IJCAI 09, UAI 09.

-Associate editor (guest) for Operations Research (Games, Information and Networks).

-Referee for: Management Science, American Economic Review, Operations Research, Econometrica, Theoretical Economics, Journal of Economic Theory, Games and Economic Behavior, Production and Operations Management, Manufacturing Services and Operations Management, Mathematics of Operations Research, Theoretical Computer Science, B.E. Journal of Theoretical Economics, Artificial Intelligence Journal, Journal of Artificial Intelligence Research, Transactions on Algorithms, Transactions on Economics and Computation, Social Choice and Welfare, SODA.

Invited Seminars

-CRCS seminar, School of Engineering and Applied Sciences, Harvard, 2014.
-Decision Sciences, Fuqua, Duke, 2014.
-Market Design summer school, Institute for advanced studies, Hebrew University, 2014.
-Operations, Information and Technology, Stanford GSB, Stanford, 2014.
-Information, Operations and Management Science, Stern, NYU, 2014.
-Management Science and Operations Management, Chicago Booth, Chicago, 2014.
-Microsoft research, New England, USA, 2013.
-Medical school, Michigan University, 2013.
-Technology and Operations, Ross School of Business, Michigan University, 2013.
-Economics, Theory seminar, Harvard/MIT, 2013.
-Game theory seminar, Faculty of Industrial Engineering, Technion, 2013.
-Industrial Engineering, University of Pittsburgh, 2013.
-Operations and Logistics Division, Sauder, The University of British Columbia, Canada, 2013.
-Management Science and Engineering, Stanford, USA, 2013.
-Industrial Engineering, UC Berkeley, USA, 2012.
-Economics, Theory seminar, Harvard/MIT, 2012.
-Economics, Indiana University Bloomington, USA, 2012.
-CS, Northwestern, USA, 2012.
-Engineering, University at Buffalo, USA, 2012.
-Operations seminar, MEDS, Northwestern, USA, 2011.
-CS, Northwestern, USA, 2011.
-Economics, Boston College, USA, 2011.
-Department of Management, London School of Economics, UK, 2011.
-Economics, University of Minnesota, USA, 2011.
-Decisions, Risk and Operations, Columbia University, USA, 2011.
-Information, Operations and Management Science, Stern, NYU, 2011.
-Operations Research Center, MIT, USA, 2011.
-Economics, University of Montreal, Canada, 2011.
-CS, Wayne state/Michigan , 2010.
-Department of Economics and Business, Pompeu Fabra, Spain, 2010.
-Humanities and Social Sciences, Caltech, USA, 2010.
-Data Science and Operations, Marshall (Business School), USC, USA, 2010.
-Microsoft research, Colloquium talk, New England, USA, 2010.
-Operations Management, Sloan, MIT, USA, 2010.
-Business School, Hebrew University, Israel, 2010.
-Economics, Hebrew University, Israel, 2009.
-Economics, Tel Aviv University, Israel, 2009.
-Economics, Haifa University, Israel, 2009.
-Economics, Ben-Gurion University, Israel, 2009.
-Economics, Bar-Ilan University, Israel, 2009.
-Economics, Maastrict University, Netherlands, 2009.
-Econ-CS Seminar, Harvard, USA, 2008.
-Google NY, 2008.
-Industrial Engineering, Technion, 2008.

-CS theory seminar, Cornell, USA, 2007.
-Microsoft research, Mountain View, USA, 2007.
-AI seminar, UIUC, USA, 2007.
-CS Theory seminar, Georgia-Tech, USA, 2007.
-AI seminar, Stanford, USA, 2007.
-Game Theory seminar. Tel Aviv, Israel, 2005.

Invited conference presentations

-Advances in market design, Paris, France, 2014.
-NSF/CEME/NBER Mathematical Economics Conference, Columbia, 2013
-Tel Aviv International Workshop on Game Theory, Israel, 2013 (plenary talk).
-Future Directions in Paired Exchange, Symposium, NYC, 2013 (plenary talk).
-American Economic Association, USA, 2012
-GReece Economic and Algorithmic Theory Week, Greece, 2011.
-Market Design Workshop, Harvard, USA, 2008.
-Dagstuhl workshop on Computational Social Systems and the Internet, Germany, 2007.
-Dagshtuhl workshop on Markets and Computation, Germany, 2005.

Other conference presentations

-Market design workshop, NBER, 2011,2012,2013. Decentralization conference, Stanford, 2014. World transplant congress, San Francisco, 2014. American Transplant Congress, Seattle, 2013.
EC 2007,2009,2010,2011,2013,2014. MSOM, 2010,2011,2014 and Sig Services, MSOM 2014. INFORMS, 2011, 2012,2013, 2014. American Economic Meetings, AEA 2011. ISMP, 2009. Tel Aviv International Workshop on Game Theory, 2011. Workshop on Sponsored-Search, Chicago, USA, 2008. Israeli Seminar on Computational Game Theory, Google, Israel, 2008. AAAI 07. aamas 06,07. UAI 05,06. Israeli Operations Research Society conference, (ORSIS-06) Nahariya, Israel 2006. Israeli Game Theory Conference, The Open University of Israel, Raanana 2006. Biennial Israeli Symposium on the Foundations of AI, (BISFAI-05), Haifa, Israel, 2005.

Teaching Experience

-Systems Optimization, 15.066, MIT, 2012,2013,2014.

-Data Models and Decisions, 15.060, MIT, 2013.

-Theory of Operations Management (focus on revenue management) 15.764, MIT, 2011.

-Operations Management 15.761, MIT, USA.

-Teaching Assistant, Technion, 2002-2008. Courses: Non-Cooperative Game Theory (graduate, undergraduate, and MBA), Probability, Linear Dynamic Systems, Scheduling, and Simulation.

-Teaching Assistant, Haifa University, 1998-1999. Courses: Introduction to Algorithms, and Computer Structure and Language.