

Curriculum Vitae

Michal Feldman

Senior Lecturer
School of Business Administration and
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Education

- Postdoctoral Fellow (Lady Davis Fellowship), May 2005 to May 2007
School of Computer Science and Engineering, Hebrew University of Jerusalem
Sponsor: Professor Noam Nisan
- Ph.D, IMS, 2005
University of California at Berkeley, School of Information.
Dissertation title: "Incentives for Cooperation in Peer-to-Peer Systems".
Advisor: John Chuang.
Dissertation committee: Scott Shenker, Hal Varian, Ion Stoica.
- M.S., IMS, 2003
University of California at Berkeley, School of Information.
- B.S., Computer Science, 1998
Summa Cum Laude
Bar-Ilan University, Ramat-Gan, Israel

Grants, Honors and Awards

- Israel Science Foundation (ISF) research grant, 2009
- Alon Fellowship, 2008
- Abe Gray Prize, Hebrew University of Jerusalem 2008
- Lady Davis Fellowship for Postdoctoral Studies, Hebrew University, 2005-2007

- SIMS Fellowship, UC Berkeley, 2000-2001
- Dean's Award for Academic achievement, Bar-Ilan University, 1999
- Dean's Award for Academic achievement, Bar-Ilan University, 1998
- Lord Wolfson Award for Academic achievement, Bar-Ilan University, 1996

Publications

Journal Articles and Book Chapters

- Mixed Strategies in Combinatorial Agency (with Moshe Babaioff and Noam Nisan).
Journal of Artificial Intelligence Research (to appear).
- A Prescriptive Approach for Playing Games.
SIGecom Exchanges, Issue 8.2, 2009 (invited).
- A Note on Competitive Diffusion Through Social Networks (with Noga Alon, Ariel Procaccia and Moshe Tennenholtz).
Information Processing Letters; forthcoming.
- Approximate Strong Equilibrium in Job Scheduling Games (with Tami Tamir)
Journal of Artificial Intelligence Research, Vol. 36, 2009. (3 citations)
- The Proportional-share Allocation Market for Computational Resources (with Li Zhang and Kevin Lai).
IEEE Transactions on Parallel and Distributed Systems, Vol. 20, 2009.
- Strong Price of Anarchy (with Nir Andelman and Yishay Mansour).
Games and Economic Behavior, Vol. 65, 2009. (**53 citations**).
- Efficient Graph Topologies in Network Routing Games (with Amir Epstein and Yishay Mansour).
Games and Economic Behavior, Vol. 66, 2009. (**42 citations**).
- Incentives in Peer-to-Peer System (with Moshe Babaioff and John Chuang).
In *Algorithmic Game Theory*, Cambridge University Press.
- The Misperception of Norms: The Psychology of Bias and the Economics of Equilibrium (with Robert Cooter and Yuval Feldman)
Review of Law and Economics, Vol. 4, 2008.
- Strong Equilibrium in Cost-Sharing Connection Games (with Amir Epstein and Yishay Mansour).
Games and Economic Behavior, Vol. 67, 2009. (26 citations)
- Hidden-Action in Network Routing (with John Chuang, Ion Stoica and Scott Shenker).
IEEE J-SAC Special Issue on Non-Cooperative Behavior in Networking, Vol. 25 (6), pages 1161-1172, August 2007. (**38 citations**).

- Free-Riding and Whitewashing in Peer-to-Peer Systems (with Christos Papadimitriou, John Chuang and Ion Stoica).
IEEE J-SAC Special Issue on Price-Based Access Control and Economics for Communication Networks, Vol. 24 (5), pages 1010-1019, May 2006. **(224 citations)**.
- Overcoming Free-Riding Behavior in Peer-to-Peer Systems (with John Chuang).
ACM Sigecom Exchanges Vol. 6 (1), July 2006 (invited). **(92 citations)**.

Peer-Reviewed Conferences

- Bayesian Ignorance (with Noga Alon, Yuval Emek and Moshe Tennenholtz).
Symposium on Principles of Distributed Computing, 2010 (PODC'10).
- Envy-Free Makespan Approximation (with Edith Cohen, Amos Fiat, Haim Kaplan, and Svetlana Olonetsky).
ACM Conference on Electronic Commerce, 2010 (EC'10).
- Adversarial Leakage in Games (with Noga Alon, Yuval Emek and Moshe Tennenholtz).
Innovations in Computer Science, 2009 (ICS'09).
- Playing Games without Observing Payoffs (with Adam Kalai and Moshe Tennenholtz).
Innovations in Computer Science, 2009 (ICS'09).
- Optimal Incentives for Participation with Type-Dependent Externalities (with Ran Tessler and Yoav Wilf).
Workshop on Internet and Network Economics, 2009 (WINE'09).
- Computing Optimal Contracts in Series-Parallel Heterogeneous Combinatorial Agencies (with Yuval Emek).
Workshop on Internet and Network Economics, 2009 (WINE'09).
- Partition Equilibrium (with Moshe Tennenholtz).
Symposium on Algorithmic Game Theory, 2009 (SAGT'09).
- Free-Riding and Free-Labor in Combinatorial Agency (with Moshe Babaioff and Noam Nisan).
Symposium on Algorithmic Game Theory, 2009 (SAGT'09).
- On the Approximability of Dodgson and Young Elections (with Ioannis Caragiannis, Jason Covey, Christopher Homan, Christos Kaklamanis, Nikos Karanikolas, Ariel Procaccia and Jeffrey Rosenschein).
ACM-SIAM Symposium on Discrete Algorithms 2009 (SODA'09). (8 citations)
- Conflicting Congestion Effects in Resource Allocation Games (with Tami Tamir).
Workshop on Internet and Network Economics 2008 (WINE'08).
- Approximate Strong Equilibrium in Job Scheduling Games (with Tami Tamir).
Symposium on Algorithmic Game Theory, 2008 (SAGT'08).

- Efficient Graph Topologies in Network Routing Games (with Amir Epstein and Yishay Mansour).
Joint Workshop of Economics of Networked Systems and Incentive-Based Computing, 2007 (NetEcon+IBC'07). (6 citations)
- Strong Equilibrium in Cost-Sharing Connection Games (with Amir Epstein and Yishay Mansour).
ACM Conference on Electronic Commerce, 2007 (EC'07), **Best Student Paper Award**.
- The Misperception of Norms: The Psychology of Bias and the Economics of Equilibrium (with Robert Cooter and Yuval Feldman).
Annual Meeting of the American Law and Economics Association, 2007.
- Strong Price of Anarchy (with Nir Andelman and Yishay Mansour).
ACM-SIAM Symposium on Discrete Algorithms, 2007 (SODA'07).
- Mixed Strategies in Combinatorial Agency (with Moshe Babaioff and Noam Nisan).
International Workshop on Internet and Network Economics, 2006 (WINE'06). Also presented in the Second Bertinoro Workshop on Algorithmic Game Theory 2006 (AGATE'06). (8 citations)
- Combinatorial Agency (with Moshe Babaioff and Noam Nisan).
ACM Conference on Electronic Commerce, 2006 (EC'06). (22 citations)
- Implementation with a Bounded Action Space (with Liad Blumrosen).
ACM Conference on Electronic Commerce, 2006 (EC'06). (12 citations)
- The Evolution of Cooperation under Cheap Pseudonyms (with John Chuang).
International IEEE Conference on E-Commerce Technology, 2005 (CEC'05). (12 citations)
- A Price-Anticipating Resource Allocation Mechanism for Distributed Shared Clusters (with Li Zhang and Kevin Lai).
ACM Conference on Electronic Commerce, 2005 (EC'05). (**55 citations**).
- Hidden-Action in Multi-Hop Routing (with John Chuang, Ion Stoica and Scott Shenker).
ACM Conference on Electronic Commerce, 2005 (EC'05). An earlier version appeared in Proceedings (online) of the Second Annual Workshop on Economics of Peer-to-Peer Systems, 2004. (38 citations)
- Free-Riding and Whitewashing in Peer-to-Peer Systems (with Christos Papadimitriou, John Chuang and Ion Stoica).
ACM SIGCOMM 2004, Workshop of Practice and Theory of Incentives and Game Theory in Networked Systems, 2004 (PINS'04). An earlier version appeared in Proceedings (online) of the Workshop on Economics of Information Security, 2004 (WEIS'04). (**224 citations**).
- Robust Incentive Techniques for Peer-to-Peer Networks (with Kevin Lai, Ion Stoica and John Chuang).
ACM Conference on Electronic Commerce, 2004 (EC'04). (**330 citations**).

- Quantifying Disincentives in Peer-to-Peer Networks (with Kevin Lai, John Chuang and Ion Stoica).
Workshop on Economics of Peer-to-Peer Systems, 2003 (p2pEcon). **(59 citations)**.
- Incentives for Cooperation in Peer-to-Peer Networks (with Kevin Lai, Ion Stoica and John Chuang).
Workshop on Economics of Peer-to-Peer Systems, 2003 (p2pEcon). **(201 citations)**.
- Service Differentiation in Web Caching and Content Distribution Networks (with John Chuang).
IASTED International Conference on Communication and Computer Networks, 2002 (CCN 2002). (6 citations)
- Improving the Usability of Open Source Software: Usability Testing of StarOffice Calc (with Susanne Eklund, Mary Trombley and Rashmi Sinha).
CHI Workshop on Open Source Usability, 2002

Working Papers

- Anarchy without Stability (with Noam Berger, Mishael Rosenthal and Ofer Neiman).
- Splitting Rationality (with Yuval Emek).
- Makespan Minimization through Coordination Mechanisms (with Mishael Rosenthal and Omri Sivan).
- Truth and Envy in Capacitated Allocation Games (with Edith Cohen, Amos Fiat, Haim Kaplan, and Svetlana Olonetsky).
- On the Interplay between Incentive Compatibility and Envy-Freeness (with Edith Cohen, Amos Fiat, Haim Kaplan, and Svetlana Olonetsky).
- Approximate Strong Equilibria in Job Scheduling Games: an Analysis for Two Uniformly Related Machines (with Leah Epstein and Tami Tamir).
- Strategyproof Approximation Mechanisms for Facility Location on Networks (with Noga Alon, Ariel D. Procaccia, and Moshe Tennenholtz).
- Walking in Circles (with Noga Alon, Ariel D. Procaccia, and Moshe Tennenholtz).

Research Activities

- Research group co-organizer, Institute for advanced studies at the Hebrew University of Jerusalem, “Algorithmic game theory: the next decade”.
- Research fellow, 2008-present
Microsoft Israel R&D Center
- Research fellow, 2004
Hewlett Packard (HP) Research Labs. Information Dynamics Lab (IDL)

Professional Activities

- Co-organizer, First, Second, Third, Fourth and Fifth Israeli Seminars on Computational Game Theory, 2006-2009.
- Program Committee member in the following conferences:
 - ACM Conference on Electronic Commerce, 2010 (EC'10).
 - International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM'09).
 - ACM Conference on Electronic Commerce, 2009 (EC'09)
 - Israel Association for Information Systems (ILAIS) conference, 2009.
 - International Joint Conference on Artificial Intelligence, 2009 (IJCAI'09)
 - International Conference on Electronic Commerce, 2009 (ICEC'09)
 - European Symposium on Algorithms, 2008 (ESA'08)
 - Workshop on the Economics of Networked Systems, 2008 (NetEcon'08)
 - ACM Conference on Electronic Commerce, 2008 (EC'08)
 - ACM Conference on Electronic Commerce, 2007 (EC'07)
 - National Conference on Artificial Intelligence, 2007 (AAAI'07)
 - Joint Workshop of Economics of Networked Systems and Incentive-Based Computing, 2007.
- Session Organizer and chair in the Israeli Operations Research Society conference, ORSIS 2008, ORSIS 2009.
- Referee for the following journals and conferences:
 - Journals:
 - * SIAM Journal on Computing
 - * IEEE Journal on Selected Areas in Communication (JSAC)
 - * IEEE/ACM Transactions on Networking
 - * IEEE Transactions on Parallel and Distributed Systems
 - * Artificial Intelligence Journal (AIJ)
 - * International Journal of Communication Systems (IJCS)
 - * Econometrica
 - * Journal of Economic Theory (JET)
 - * Management Science
 - * Games and Economic Behavior
 - * Computer Networks Journal
 - * Distributed Computing
 - Conferences and workshops:
 - * ACM Conference on Electronic Commerce (ACM EC), 2005-2006

- * IEEE Conference on Electronic Commerce (IEEE CEC), 2005
- * International Conference on Information Systems (ICIS), 2004
- * ACM SIGCOMM Workshop on Practice and Theory on Incentives in Networked Systems (PINS), 2004
- * International Workshop on Peer-to-Peer Systems (IPTPS), 2003
- * Workshops on Economics of Peer-to-Peer Systems (p2pEcon), 2003-2004

Teaching Experience (Courses Taught):

- Topics on the Border of Computation and Economics
- Intelligent Information Systems
- Electronic Commerce
- Computational Aspects in Game Theory
- Foundations of Electronic Commerce
- Logic Programming (student instructor)
- Mathematical Logic (student instructor)
- Mathematical Logic and Discrete Math (student instructor)

Current Students

- Mishael Rosenthal (PhD)
- Dror Shemesh (MSc)
- Aviv Peretz (MSc)

Military Service

- Researcher at the IDF Intelligence research unit ("Haman Talpiot"), 1994-1996

Personal

- Date of birth: February 1, 1976
- Gender: female
- Citizenship: Israeli