Nima Haghpanah's Resume

CONTACT INFORMATION	**PhD. Student** *Tel:* (+1)(312) 622-6553

CONTACT INFORMATION

PhD. Student
Theory and Economics Groups
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RESEARCH INTERESTS

- Algorithms, Approximation, Optimization
- Algorithmic Game Theory, Mechanism Design
- Computational Economics, Algorithmic Pricing, Economic Aspects of the Internet
- Social Networks, Diffusion of Technologies, Network Design

EDUCATION

Northwestern University, Evanston, IL

PhD in Computer Science, September 2009 - current

- Advisor: Prof. Jason Hartline
- Thesis: Optimal Multi-parameter Auction Design.
- Relevant courses: Combinatorial Optimization, Randomized Algorithms, Social Networks, The Probabilistic Method, Microeconomics I,II,III, Dynamic Decision Models, Static Decision Models, Game Theory, Mechanism Design with LP, Algorithmic Mechanism Design.

Sharif University of Technology, Tehran, Iran

M.S. Computer Engineering (Software), September 2006 - November 2008

- Thesis: "Online Job Scheduling Mechanisms", under supervision of Mohammad Ghodsi
- Relevant courses: Advanced Algorithms, PhD seminars (topics in Algorithmic game theory and randomized algorithms), Parallel Algorithms, Data Mining

B.S., Computer Engineering (Software), September 2001 - June 2006

HONORS AND AWARDS

- 2013-2015: Simons Award for Graduate Students in Theoretical Computer Science.
- 2012: Winner, Yahoo! Key Scientific Challenges.
- 2006: Ranked 1st, 11'th "National Olympiad for University Students", Iran.

EXPERIENCES

- **Harvard University**, January 2014 - present. Visiting PhD Student.
- **Cornell University**, January-May 2013. Visiting PhD Student working with Professor Robert Kleinberg.
- **Google NYC**, July-September 2012. Summer intern in the AdX team. Project: "AdX lost revenue opportunity". Developed a tool to estimate the revenue produced by AdX based on the features of given impressions.
- **IPM** (Institute for Studies in Theoretical Physics and Mathematics), 2006 - 2007. Research assistant in Computer Science School, Tehran, Iran.

PUBLICATIONS

- N. Haghpanah, J. Hartline, "Reverse Mechanism Design", in preparation.
- Z. Abbassi, N. Haghpanah, V. Mirrokni, "Exchange Market Mechanisms without Money", in preparation.
- H. Fu, N. Haghpanah, J. Hartline, R. Kleinberg, "Optimal Auctions for Correlated Bidders with Sampling", to appear in 15th ACM Conference on Electronic Commerce (**EC 2014**).
- S. Alaei, H. Fu, N. Haghpanah, J. Hartline, "The Simple Economics of Approximately Optimal Auctions", in 54th IEEE Symposium on Foundations of Computer Science (**FOCS 2013**).
- M. Bateni, N. Haghpanah, B. Sivan, M. Zadimoghaddam, "Revenue Maximization with Nonexcludable Goods", to appear in 9th Conference on Web and Internet Economics (**WINE 2013**).

- S. Alaei, H. Fu, N. Haghpanah, J. Hartline, A. Malekian "Bayesian Optimal Auctions via Multi-to Single-agent Reduction", In 13th ACM Conference on Electronic Commerce (**EC 2012**).
- N. Haghpanah, N. Immorlica, V. Mirrokni, K. Munagala, "Social Network Auctions with Positive Externalities", ACM Transactions on Economics and Computation (**TEAC**) 1, no. 2 (2013): 13. Conference version appeared in proceedings of 12th ACM Conference on Electronic Commerce (**EC 2011**).
- N. AhmadiPourAnari, S. Ehsani, M. Ghodsi, N. Haghpanah, N. Immorlica, H. Mahini and V.S. Mirrokni, "Equilibrium Pricing with Positive Externalities", Theoretical Computer Science (**TCS**), Volume 476, 11 March 2013, Pages 1-15. Conference version appeared in proceedings of Sixth Conference on Web and Internet Economics (**WINE 2010**).
- H. Akhlaghpour, M. Ghodsi, N. Haghpanah and H. Mahini, V.S. Mirrokni, A. Nikzad, "Optimal Iterative Pricing over Social Networks", Proceedings of Sixth Conference on Web and Internet Economics (**WINE 2010**).

TEACHING ASSISTANTSHIP EXPERIENCES
- Mathematical Foundations for Computer Science, Northwestern University, Fall 2009, Prof. Immorlica. Winter 2012, Prof. Rahimi.
- Algorithms, Northwestern University, Spring 2011, Prof. Hartline.
- Algorithmic Game Theory (M.Sc. course), Sharif University of Technology, Fall 2008, Prof. Safari.
- Advanced Algorithms (M.Sc. course), Sharif University of Technology, Fall 2008, Prof. Ghodsi.
- Parallel Processing (M.Sc. course), Sharif University of Technology, Spring 2008, Prof. Ghodsi.

TECHNICAL SKILLS
- Languages: Java, C#, C, C++, Python, Prolog, MPI parallel processing library
- Databases: Oracle, Microsoft SQL Server
- Computer Graphics: OpenGL, familiarity with MAYA

PROFESSIONAL ACTIVITIES
- subreferee for: ACM Transactions on Algorithms, ACM Transactions on Economics and Computation, STOC'09'13, WWW'10, WINE'10'11'12, FOCS'10'13, ICALP'12, EC'12'13, ESA'12.
- Organizing Algorithmic Game Theory reading group, Sharif University of Technology, Fall 2008.