# Negin Golrezaei

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## **Employment**

Assistant Professor, MIT, Cambridge, MA, June 2018 - present

Post Doc, Google, New York, NY, June 2017 - June 2018

Research Summer Intern, Google, New York, NY, 2015 - 2016

#### Education

Ph.D., University of Southern California (USC), Los Angeles, CA

Data Sciences and Operations Department, Marshall School of Business

- Dissertation Title: Efficient Policies and Mechanisms for Online Platforms 2012-2017

M.Sc., Sharif University of Technology, Tehran, Iran

Electrical Engineering Department, Communications 2007-2009

B.Sc., Sharif University of Technology, Tehran, Iran

Electrical Engineering Department, Electronics 2003-2007

#### **Awards and Honors**

Elwood S. Buffa Doctoral Dissertation Award from the Decision Sciences Institute, 2018.

Finalist for the INFORMS Data Mining Competition, 2018.

Dantzig Dissertation Award, 2017.

Revenue Management and Pricing Dissertation Award, 2017.

USC Ph.D. Achievement Award, USC, 2017.

CAMS Prize, for excellence in research with a substantial mathematical component, USC, 2017.

Finalist for the POMS SCM College Best Student Paper Competition, 2017.

Finalist for the MSOM Student Paper Competition, 2016.

University Outstanding Teaching Award, USC, 2016.

Marshall Ph.D. Teaching Award, USC, 2016.

Provost Fellowship, USC, 2011-2013.

### **Publications**

- 1. N. Golrezaei, H. Nazerzadeh, and R. Randhawa, "Dynamic Pricing for Heterogeneous Time-Sensitive Customers," Manufacturing & Service Operations Management, forthcoming.
- 2. N. Golrezaei and H. Nazerzadeh, "Auctions with Dynamic Costly Information Acquisition," **Operations Research**, vol. 65, issue 1, pp. 130 144, Aug. 2016.
  - A preliminary version was presented in Ad Auctions Workshop of 15th ACM Conference on Economics and Computation (EC14), Palo Alto, California, June 8-12, 2014.
- 3. N. Golrezaei, H. Nazerzadeh, and P. Rusmevichientong, "Real-time Optimization of Personalized Assortments," Management Science, vol. 60, issue 6, pp. 1532 1551, Feb., 2014.

- Finalist for the 2016 MSOM Student Paper Competition.
- Finalist for the 2017 POMS SCM College Best Student Paper Competition.
- A preliminary version appeared in the Proceedings of the 14th ACM Conference on Electronic Commerce (EC13), Philadelphia, PA, June 16-20, 2013.
- N. Golrezaei, A.G. Dimakis, and A.F. Molisch, "Scaling Behaviors of Wireless Device-to-Device Communications with Distributed Caching," IEEE Transactions on Information Theory, vol. 60, issue 7, pp. 4286 4298, July, 2014.
  - A preliminary version, titled "Wireless Device-to-Device Communications with Distributed Caching," appeared in the proceeding of IEEE International Symposium on Information Theory (ISIT), pp. 2781-2785, Cambridge, MA, July 1-6, 2012.
- N. Golrezaei, P. Mansourifard, A.F. Molisch, and A.G. Dimakis, "Base-Station Assisted Device-to-Device Communications for High-Throughput Wireless Video Networks," IEEE Transactions on Wireless Communications, vol. 13, issue 7, pp. 3665 - 3676, July, 2014.
  - A preliminary version appeared in the proceeding of IEEE International Conference on Communications (ICC), pp. 7077 7081, Ottawa, ON, June 10-15, 2012.
- K. Shanmugam, N. Golrezaei, A.G. Dimakis, A.F. Molisch, and G. Caire, "FemtoCaching: Wireless Video Content Delivery through Distributed Caching Helpers," IEEE Transactions on Information Theory, vol. 59, issue 12, pp. 8402 - 8413, Dec., 2013.
  - A preliminary version appeared in the proceeding of International Conference on Computer Communications (INFOCOM), pp. 1107 1115, Orlando, FL, Mar. 25-30, 2012.
- N. Golrezaei, A.F. Molisch, A.G. Dimakis, and G. Caire, "FemtoCaching and Device-to-Device Collaboration: A New Architecture for Wireless Video Distribution," IEEE Communications Magazine, vol. 51, issue 4, pp. 142 149, Apr., 2013.

## **Working Papers**

- 1. N. Golrezaei, M. Lin, V. Mirrokni, and H. Nazerzadeh, "Boosted Second-price Auctions for Heterogeneous Bidders," Major revision, **Management Science**.
  - Finalist for the 2018 INFORMS Data Mining Best Theoretical Paper Competition.
- 2. N. Golrezaei, I. Lobel, and R. Paes Leme, "Auction Design for ROI-Constrained Buyers," submitted for publication.
- 3. N. Golrezaei, V. Manshadi, and V. Mirrokni, "Two-Stage Pandora's Box for Product Ranking," submitted for publication.
- 4. N. Golrezaei, A. Javanmard, and V. Mirrokni, "Dynamic Incentive-Aware Learning: Robust Pricing in Contextual Auctions." submitted for publication.
- 5. H. Beyhaghi, N. Golrezaei, R. Paes Leme, M. Pal, and B. Sivan, "Improved Approximations for Free-Order Prophets and Second-Price Auctions." submitted for publication.
- 6. S. Balseiro, N. Golrezaei, M. Mahdian, V. Mirrokoni, J. Schneider, "Contextual Bandits with Cross-learning."

## Work and Teaching Experiences

Instructor, Operations Management, USC, Spring 2016.

- Recognized by the Marshall Ph.D. Teaching Award and the USC University Outstanding Teaching Award.
- Number of enrolled students: 69 students, teaching score: 4.5 out of 5.
- Topic covered: Process Analysis and Capacity Management, Waiting Line Management, Optimization and Linear Programming, Revenue Management, and Inventory Management and Supply Chain Coordination
- Case studies: Kristen's Cookies case, Zara case, Saintmarie University Hospital case, and Timeshare Exchange Fair case.

#### Teaching Assistant

- Operations Management, USC, Spring 2015.
- Signals and Systems, Sharif University of Technology, 2009-2010.
- Control Systems, Sharif University of Technology, 2007.

#### **Invited Talks**

"Dynamic Incentive-Aware Learning: Robust Pricing in Contextual Auctions"

MIT Operations Research Center IAP Seminar, Jan. 2019.

IBM T. J. Watson Research Center, Yorktown Heights, May 2018.

"Two-Stage Pandora's Box for Product Ranking"

POMS Annual Conference, Washington, D.C., May 2019.

IOMS Department, NYU Stern, April 2018.

Workshop on Networks, Matching, and Platforms, Salt Lake City, Feb. 2018.

"Real-time Optimization of Personalized Assortments"

- Decision Sciences Institute Annual Conference, Nov. 2018.
- Staples, Inc., Feb. 2017.
- The Technology and Operations Management Area at INSEAD, Feb. 2017.
- The Rady School of Management, University of California, San Diego, Feb. 2017.
- The Yale School of Management, Yale University, Feb. 2017.
- The Graduate School of Business, Columbia University, Jan. 2017.
- The Ross School of Business, University of Michigan, Jan. 2017.
- The Management Science and Operations Division, London Business School, Jan. 2017.
- The Kenan-Flagler Business School, University of North Carolina at Chapel Hill, Jan. 2017.
- The Kellogg School of Management, Northwestern University, Jan. 2017.
- The Naveen Jindal School of Management, University of Texas at Dallas, Dec. 2016.
- The Robert H. Smith School of Business, University of Maryland, Dec. 2016.
- The Sloan School of Management, Massachusetts Institute of Technology, Dec. 2016.
- INFORMS Annual Meeting, Nashville, Tennessee, Nov. 2016.
- Southern California OM/OR Day, University of California, Irvine, May 2016.
- ACM Conference on Electronic Commerce (EC), Philadelphia, Pennsylvania, June 2013.

<sup>&</sup>quot;Auctions with Dynamic Costly Information Acquisition"

- INFORMS Annual Meeting, Philadelphia, Pennsylvania, Nov. 2015.
- INFORMS Annual Meeting, San Francisco, California, Nov. 2014.
- INFORMS Annual Meeting, Minneapolis, Minnesota, Oct. 2013.

"Optimal Dynamic Pricing for Customers with Heterogeneous Valuation Decay"

- MSOM Conference, Chapel Hill, North Carolina, June 2017.
- SoCal NEGT Symposium 2015, USC, Los Angeles, California, Oct. 2015.
- POMS Annual Conference, Washington D.C., May 2015.

"Boosted Second-price Auctions for Heterogeneous Bidders"

- INFORMS Annual Meeting, Data Mining Workshop, Phoenix, Arizona, Nov. 2018.
- Google New York, May. 2018.
- The Sloan School of Management, Massachusetts Institute of Technology, Nov. 2017.
- INFORMS Annual Meeting, Houston, Texas, Oct. 2017.
- 3rd Workshop on Algorithmic Game Theory and Data Science, Cambridge, MA, June 2017.
- Marketplace Innovation Workshop, Palo Alto, California, May 2017.
- POMS Annual Conference, Seattle, Washington, May 2017.
- Google New York, Aug. 2016.

#### Referee Services

- Referee for Management Science, Operations Research, Manufacturing & Service Operations Management, Production and Operations Management, Stochastic Systems, INFORMS Journal on Optimization.
- PC member of the Web Conference 2019 (formerly known as WWW2019).
- PC member of the 19th and 20th ACM conferences on Economics and Computation (ACM EC'18 and EC'19).
- Judge for the 2019 INFORMS O.R. & Analytic Student Team Competition.
- ACM Conference on Economics and Computation (EC), World Wide Web Conference (WWW), Web and Internet Economics (WINE), International Symposium on Algorithmic Game Theory (SAGT).
- Referee for Decision Sciences, Institute of Industrial and Systems Engineers (IISE).
- Referee for IEEE Transactions on Information Theory, IEEE Transactions on Wireless Communications, IEEE Transactions on Vehicular Technology, ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc), IEEE International Conference on Communications (ICC).

### Computer Skills

Programming Languages: C++, Matlab

 ${\bf Data\ Analytics\ and\ Database\ Tools:\ R,\ SQL,\ Dremel,\ MapReduce}$ 

Web Development Tools: HTML, CSS, PHP, JAVAScript, JQuery

#### **Outside Activities**

Research Advisor, Google Research, New York, NY, 10/2018-present.

#### Citizenship

US Permanent Resident