Ramesh Johari
Associate Professor of Management Science and Engineering and, by courtesy, of Computer Science and of Electrical Engineering

CONTACT INFORMATION
• Administrator
  Jenny Lam - Administrative Associate
  Email  lamjenny@stanford.edu
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Bio

Johari is broadly interested in the design, economic analysis, and operation of online platforms, as well as statistical and machine learning techniques used by these platforms (such as search, recommendation, matching, and pricing algorithms).

ACADEMIC APPOINTMENTS
• Associate Professor, Management Science and Engineering
• Associate Professor (By courtesy), Electrical Engineering
• Associate Professor (By courtesy), Computer Science
• Affiliate, Precourt Institute for Energy

HONORS AND AWARDS
• George E. Nicholson Student Paper Competition (First Place), INFORMS (2003)
• George M. Sprowls Doctoral Dissertation Award, MIT EECS (2004)
• Doctoral Dissertation Award (Honorable Mention), ACM (2004)
• Okawa Foundation Research Grant, Okawa Foundation (2005)
• Telecommunications Dissertation Award, INFORMS (2006)
• CAREER Award, National Science Foundation (2007)

PROGRAM AFFILIATIONS
• Institute for Computational and Mathematical Engineering (ICME)

PROFESSIONAL EDUCATION
• PhD, MIT (2004)

LINKS
Teaching

COURSES

2018-19
• "Small" Data: Prediction, Inference, Causality: MS&E 226 (Aut)
• Advanced Topics in Game Theory with Engineering Applications: MS&E 326 (Spr)

2017-18
• "Small" Data: MS&E 226 (Aut)
• Advanced Topics in Game Theory with Engineering Applications: MS&E 326 (Spr)

2016-17
• "Small" Data: MS&E 226 (Aut)
• Senior Project: MS&E 108 (Win)
• Stochastic Modeling: MS&E 221 (Win)

2015-16
• "Small" Data: MS&E 226 (Aut)
• Stochastic Modeling: MS&E 221 (Win)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)
Kristen Altenburger, Imanol Arrieta Ibarra, Xiuyuan Lu, Stephen Ragain

Postdoctoral Faculty Sponsor
Virag Shah

Master's Program Advisor
Anvita Gupta, Simon Hagege

Doctoral (Program)
Hannah Li

Postdoctoral Research Mentor
Mohammad Rasouli

Publications

PUBLICATIONS

  Berry, R., Johari , R.
  NOW Publishers..2013: 1

  DiPalantino, D., Johari, R.
  2012

• Mean field equilibria of multiarmed bandit games.
  Gummadi, R., Johari, R., Yu , J.-Y.
  2012
- Information and the value of execution guarantees.
  Iyer, K., Johari, R., Moallemi, C., C.
  2012

- Mean field equilibria of dynamic auctions with learning.
  Iyer, K., Johari, R., Sundararajan, M.
  2011

- Heavy traffic approximation of equilibria in resource sharing games.
  Wu, Y., Bui, L., Johari, R.
  2011

- Committing bandits.
  Bui, L., Johari, R., Mannor, S.
  2011

- How many tiers? Pricing in the Internet transit market.
  Valancius, V., Lumezanu, C., Feamster, N., Johari, R., Vazirani, V.
  2011

- Mean field analysis for large population stochastic games.
  Adlakha, S., Johari, R., Weintraub, G., Y., Goldsmith, A.
  2010

- Mean field equilibrium in dynamic games with complementarities.
  Adlakha, S., Johari, R.
  2010

- Information aggregation in smooth markets.
  Iyer, K., Johari, R., Moallemi, C., C.
  2010

- Congestible services and network effects.
  Johari, R., Kumar, S.
  2010

- Information theoretic operating regimes of large wireless networks. *IEEE Transactions on Information Theory*
  Ozgur, A., Johari, R., Tse, D., Leveque, O.
  2010; 1 (56): 427-437

- Network formation: bilateral contracting and myopic dynamics. *IEEE Transactions on Automatic Control*
  Arcaute, E., Johari, R., Mannor, S.
  2009; 8 (54): 1765-1778

- A comparison of bilateral and multilateral exchanges for peer-assisted content distribution.
  Aperjis, C., Freedman, M., J., Johari, R.
  2008

- Local myopic dynamics in network formation games.
  Arcaute, E., Johari, R., Mannor, S.
  2008

- Peer-assisted content distribution with prices.
  Aperjis, C., Freedman, M., J., Johari, R.
  2008

- Oblivious equilibrium for general stochastic games with unbounded costs.
  Adlakha, S., Johari, R., Weintraub, G., Y., Goldsmith, A.
  2008
• Oblivious equilibrium for general stochastic games with concave costs.  
  Adlakha, S., Johari, R., Weintraub, G., Y., Goldsmith , A.  
  2008

• A comparison of bilateral and multilateral exchanges for peer-assisted content distribution.  
  Aperjis, C., Freedman, M., J., Johari, R.  
  2008

• Prices are right: aligning incentives for peer-assisted content distribution.  
  Freedman, M., J., Aperjis, C., Johari, R.  
  2008

• Oblivious equilibrium for general stochastic games with many players.  
  Abhishek, V., Adlakha, S., Johari, R., Weintraub, G., Y.  
  2007

• Efficiency loss and the design of scalable resource allocation mechanisms. Algorithmic Game Theory  
  Johari , R.  
  edited by Nisan, N., Roughgarden, T., Tardos, E.  
  Cambridge University Press: Cambridge, United Kingdom.2007: 543–567

• Revenue management for content delivery.  
  Shakkottai, S., Johari, R.  
  2007

• Network formation: bilateral contracting and myopic dynamics.  
  Arcaute, E., Johari, R., Mannor, S.  
  2007

• A peer-to-peer system as an exchange economy.  
  Aperjis, C., Johari, R.  
  2006

• Positive externalities and optimal scale.  
  Kumar, S., Johari, R.  
  2006

• Efficiency loss in a network resource allocation game: the case of elastic supply. IEEE Transactions on Automatic Control  
  Johari, R., Mannor, S., Tsitsiklis, J., N.  
  2005; 11 (50): 1712-1724

• Communication requirements of VCG-like mechanisms in convex environments.  
  Johari, R., Tsitsiklis, J., N.  
  2005

• Network resource allocation and a congestion game: the single link case.  
  Johari, R., Tsitsiklis, J., N.  
  2003

• End-to-end congestion control for the Internet: delays and stability. IEEE/ACM Transactions on Networking  
  Johari, R., Tan, D., K.H.  
  2001; 6 (9): 818-832