Mohsen Bayati
Associate Professor of Operations, Information and Technology at the Graduate School of Business
Operations, Information & Technology

Bio

BIO
See Personal Homepage.

ACADEMIC APPOINTMENTS
• Associate Professor, Operations, Information & Technology
• Member, Bio-X

HONORS AND AWARDS
• National Science Foundation CAREER Award, Stanford University (2016)
• Best paper award, INFORMS Applied Probability Society (2015)
• William Pierskalla best paper award, INFORMS Health Applications Society (2014)
• Gold Medal, International Mathematics Olympiad (1997)

LINKS
• Personal Homepage: http://web.stanford.edu/~bayati
• Department website: http://www.gsb.stanford.edu/faculty-research/faculty/mohsen-bayati

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS
For a full description of some of my current projects, please visit my Personal Homepage.

Teaching

COURSES

2018-19
• Business Intelligence from Big Data: OIT 367 (Win)
• Data, Learning, and Decision-Making: OIT 604 (Spr)

2017-18
• Business Intelligence from Big Data: OIT 367 (Win)
• Data, Learning, and Decision-Making: OIT 604 (Spr)

2016-17
• Business Intelligence from Big Data: OIT 367 (Win)
• Data for Action: From Insights to Applications: OIT 536 (Win)

2015-16
• Business Intelligence from Big Data: OIT 367 (Win)
• Data for Action: From Insights to Applications: OIT 536 (Win)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)
Yuanyuan Shen

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS
• Biomedical Informatics (Phd Program)

Publications

PUBLICATIONS
• Accurate Emergency Department Wait Time Prediction M&SOM-MANUFACTURING & SERVICE OPERATIONS MANAGEMENT
Ang, E., Kwasnick, S., Bayati, M., Plambeck, E. L., Aratow, M.
2016; 18 (1): 141-156

• Active Postmarketing Drug Surveillance for Multiple Adverse Events OPERATIONS RESEARCH
Goh, J., Bjarnadottir, M. V., Bayati, M., Zenios, S. A.
2015; 63 (6): 1528-1546

• UNIVERSALITY IN POLYTOPE PHASE TRANSITIONS AND MESSAGE PASSING ALGORITHMS ANNALS OF APPLIED PROBABILITY
Bayati, M., Lelarge, M., Montanari, A.
2015; 25 (2): 753-822

• Bargaining dynamics in exchange networks JOURNAL OF ECONOMIC THEORY
Bayati, M., Borgs, C., Chayes, J., Kanoria, Y., Montanari, A.
2015; 156: 417-454

• A Low-Cost Method for Multiple Disease Prediction. AMIA ... Annual Symposium proceedings / AMIA Symposium. AMIA Symposium
Bayati, M., Bhaskar, S., Montanari, A.
2015; 2015: 329-338

• Data-Driven Decisions for Reducing Readmissions for Heart Failure: General Methodology and Case Study PLOS ONE
Bayati, M., Braverman, M., Gillam, M., Mack, K. M., Ruiz, G., Smith, M. S., Horvitz, E.
2014; 9 (10)

• COMBINATORIAL APPROACH TO THE INTERPOLATION METHOD AND SCALING LIMITS IN SPARSE RANDOM GRAPHS ANNALS OF PROBABILITY
Bayati, M., Gamarnik, D., Tetali, P.
2013; 41 (6): 4080-4115

• Simple Deterministic Approximation Algorithms for Counting Matchings STOC 07: PROCEEDINGS OF THE 39TH ANNUAL ACM SYMPOSIUM ON THEORY OF COMPUTING
Bayati, M., Gamarnik, D., Katz, D., Nair, C., Tetali, P.
2007: 122-127

• Iterative scheduling algorithms 26th IEEE Conference on Computer Communications (INFOCOM 2007)
Bayati, M., Prabhakar, B., Shah, D., Sharma, M.
IEEE.2007: 445–453
- **A sequential algorithm for generating random graphs**  
  10th Int Workshop on Approximation Algorithms for Combinatorial Optimization Problems/11th Int Workshop on Randomization and Computation  
  Bayati, M., Kim, J. H., Saberi, A.  
  SPRINGER-VERLAG BERLIN.2007: 326–340

- **A simpler max-product Maximum Weight Matching algorithm and the auction algorithm**  
  IEEE International Symposium on Information Theory  
  Bayati, M., Shah, D., Sharma, M.  
  IEEE.2006: 557–561

- **Maximum weight matching via max-product belief propagation**  
  IEEE International Symposium on Information Theory and Its Applications  
  Bayati, M., Shah, D., Sharma, M.  
  IEEE.2005: 1763–1767

- **Achieving stability in networks of input-queued switches using a local online scheduling policy**  
  GLOBECOM '05: IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE, VOLS 1-6  
  Nabar, S. U., Kumar, N., Bayati, M., Keshavarzian, A.  
  2005: 694-698