

## MIT Sloan CV Format

### Curriculum Vitae

**Name:** Hazhir Rahmandad

**Department:** System Dynamics Group

**Month/Year of Birth:** 09/1977

**Place of Birth:** Tehran, Iran

**Citizenship/**

**Immigration Status:** U.S. citizen

#### I. Education

BSc, Industrial Engineering  
Ph.D., System Dynamics

Sharif University of Technology      06/2000  
Massachusetts Institute of Tech.      09/2005

#### II. Title of Doctoral Thesis

Three essays on modeling dynamic organizational processes

#### III. Principal Field(s) of Interest

System Dynamics, Strategy, Healthcare

#### IV. Name and Rank of other Sloan Faculty in Same Field

##### *System Dynamics Group*

John Sterman	Professor
Nelson Repenning	Professor
David Keith	Assistant Professor

#### V. Non-MIT Employment

<i>Virginia Tech</i>	<i>Assoc. Professor (tenured)</i>	<i>06/2012</i>	<i>07/2015</i>
<i>Virginia Tech</i>	<i>Assistant Professor</i>	<i>08/2006</i>	<i>06/2012</i>
<i>Avaya Corp.</i>	<i>Research Affiliate</i>	<i>2004</i>	<i>2007</i>

#### VI. History of MIT Appointments

<i>Associate Professor</i>	<i>7/2016</i>	
<i>Assistant Professor</i>	<i>7/2015</i>	<i>7/2016</i>
<i>Visiting Associate Professor</i>	<i>7/2013</i>	<i>7/2015</i>
<i>Postdoctoral Associate</i>	<i>9/2005</i>	<i>8/2006</i>

#### VII. MIT Activities

*Personnel reappointment subcommittee*      *07/2015*

#### VIII. Governmental Committees and Service

Health Resources and Services Administration, Organ Procurement  
& Transplantation Network; Advisor to Deceased donor potential study 2010      2011

## IX. Consulting Activities

<i>PWC</i>	<i>London, UK</i>	<i>2014</i>	<i>2014</i>
<i>Kids Risk</i>	<i>Cambridge, MA</i>	<i>2009</i>	<i>2010</i>
<i>IBM</i>	<i>Armonk, NY</i>	<i>2006</i>	<i>2006</i>

## X. Other Activities

### **MIT Executive Education**

1. Project management simulator workshop (2013, 2014)

### **Workshops Led or Organized**

1. Workshop Coordinator, International System Dynamics Conference (2006-2011, Excluding 2010); coordinated and oversaw smooth operation of over 50 scientific workshops.
2. Workshop lead, National Institutes of Health and Centers for Disease Control workshop, Institute on Systems Science and Health, System Dynamics Track, May 2011, Pittsburgh, PA. Organized a full-week workshop on system dynamics modeling applications in healthcare. Participants were all researchers/faculty members with public health background. Most participants rated my teaching at the highest level, i.e. "Far Exceeded Expectations."
3. Workshop lead, Quantitative modeling techniques workshop, May 2010, Paris, France: Covered "The dynamics of diffusion" and "Advances in agent-based Modeling."
4. Organized and managed the system dynamics boot camp course for VT ISE Ph.D. students, Fall 2009 (Full semester non-credit course with seven participants; ~ 20 class hours total).
5. Helped in the design and organization of a consulting workshop in Tehran, Iran; over 60 consultants participated in the event (2008).
6. Designed and implemented two one-week workshops on entrepreneurial management, held in Tehran, Iran with participation of 50 private sector managers (2007 and 2008).
7. Organized system dynamics bootcamp workshop at the International System Dynamics Conference, Boston, July 2007.
8. Organized a workshop on "Bringing dynamics into strategic management" in "International Management Conference", Tehran, Iran, December 2006. The over-subscribed half-day workshop had more than 150 attendees and I was the sole presenter.

### **Conferences Organized**

1. Co-organizer and Local Host, Theoretical Organization Models (2016), Cambridge, MA. Two day mini-conference bringing together scholars active in modeling organizational processes.

## XI. Awards

### **Scholarly Awards**

1. *Jay W. Forrester award (best SD paper in previous five years)* 2015
2. *Academy of Management Best Paper Proceedings Selection* 2013, 2015
3. *CIDER Teach of the Week* 2011

- |                                                                 |            |
|-----------------------------------------------------------------|------------|
| 4. Dana Meadows Award (best SD student paper)                   | 2001, 2004 |
| 5. Best paper- National Industrial Engineering Conference, Iran | 1999       |
| 6. Gold Medal- International Chemistry Olympiad - Moscow        | 1996       |

**Competitive Grants**

1. Systems Analysis of Social Pathways of Epidemics to Reduce Health Disparities, National Institutes of Health (Grant # 1R01GM109718), \$1,757,042, 8/15/2014-5/31/2019, Share: 1% (\$17,570). Co-PIs: Abbas & Marathe.
2. Analyzing and improving technology investment decisions at hospitals, AHRQ, \$100,000, 5/20/2013-5/20/2014, PI Share: 30%. Co PI: Wernz.
3. Modeling the dynamics of adult depression, NIH, \$417,858, 4/1/2014-3/31/2015, PI Share: 50%. Co-PI: Wittenborn.
4. Dynamics of obesity intervention adoption, implementation, and maintenance, National Institutes of Health (Grant # 1R21HL113680-01), \$408,951, 8/15/2012-5/14/2014, PI Share: 100% (\$426,471). Co-PI: Ammerman.
5. Impact of market behavior on the adoption and diffusion of innovative green building technologies in residential firms, Department of Housing and Urban Development, \$363475, 8/16/2011-8/15/2013, PI Share: 10%. Co PIs: McCoy and Koebel.
6. Modeling and analyzing the governance of NextGen, Sponsor: Federal Aviation Administration (FAA) (Virginia Tech is subcontractor to Stevens Institute of Technology), Funding Amount: \$40,000, Period: 1/1/2011-12/31/2011, PI Share: 100%.
7. Understanding the dynamics of online communities, Sponsor: National Science Foundation (Innovation and Organizational Sciences; Grant # 1027413), Funding Amount: \$149,136, Period: 1/1/2011-12/31/2014, PI Share: 100%.
8. Modeling obesity dynamics in the U.S., Sponsor: National Institutes of Health (Contract #: HHSN27620100004C), Funding Amount: \$247,197, Period: 1/1/2010-5/1/2012, PI Share: 100%.
9. Applications of Web 2.0 in innovation process, Sponsor: Companies PRTM and UPM, Funding Amount: \$28,820, Period: 1/1/2009-8/31/2009. PI Share: 100%.
10. Efficiency and workflow analysis at MCT, Sponsor: MCT Information Services, Funding Amount \$32,130, Period: 5/15/2008, 8/15/2008, PI Share: 33%. Co PIs: Triantis and Hoopes

**XII. Professional Membership and Activities**

**Memberships**

Academy of Management  
 INFORMS  
 Strategic Management Society  
 System Dynamics Society

<b>Review Boards</b>	<b>Start</b>	<b>End</b>
<i>System Dynamics Review</i>	2012	
<i>National Science Foundation</i>	2007	2007
<i>National Institutes of Health</i>	2008	2014

**Referee Activities**

*American Journal of Clinical Nutrition*  
*Computational and Mathematical Organization Theory*  
*Decision Support Systems*  
*Epidemiology and Infection*  
*European Journal of Operational Research*  
*Health Education and Behavior*  
*Health Services Research*  
*Health Systems*  
*Industrial and Corporate Change*  
*International Journal of Production Economics*  
*International Journal of Production Research*  
*Journal of Artificial General Intelligence*  
*Journal of Obesity*  
*Journal of Operations Management*  
*Journal of Product Innovation Management*  
*Management Science*  
*Operations Research*  
*Organization Science*  
*Production and Operations Management*  
*Research in Human Development*  
*Risk Analysis*  
*Strategic Management Journal*  
*System Dynamics Review*  
*Transactions on Modeling and Computer Simulation*  
*Vaccine*

**XIII. Subjects Taught**

**MIT**

15.871 <i>Introduction to System Dynamics</i>	2013-2015
15.872 <i>System Dynamics II</i>	2013-2015
15.879 <i>System Dynamics Ph.D. Seminar</i>	2014

**Virginia Tech**

<i>ENGR 5004 Systems Engineering Process</i>	2009-2013
<i>ISE 6024 Advanced Dynamic Modeling</i>	2008, 2009, 2012
<i>ENGR 5104 Applied Systems Engineering</i>	2006-2012
<i>ISE 5015 Management of Change, Innovation, &amp; Performance</i>	2008
<i>ISE 5134 Management Information Systems</i>	2007

**XIV. Thesis Supervision**

**1. Doctoral Theses Supervised**

1. Armin Ashouri (2016) Dynamics of online communities (VT)
2. Mohammad Jalali (2015) Three essays on systems thinking and dynamic modeling in obesity prevention interventions (VT)

3. Nasim Sabounchi (2012) Extending the system dynamics toolbox to address policy problems in transportation and health (VT)
4. Maggie Hu (2011) Three essays on modeling complex dynamic problems in health and safety (VT)

**2. Master's Theses Supervised**

1. Thanujan Ratnarajah (2008) Modeling the dynamics of software competition to find appropriate openness and pricing strategy (VT)

**3. Bachelor's Theses Supervised**

NA

## XV. Publications

### 1. Theses

1. Three essays on modeling dynamic organizational processes (2005), Ph.D. thesis

### 2. Refereed Journal Articles

1. Rahmandad, H., Repenning, N., & Henderson, R. (Forthcoming). Making the Numbers? "Short termism" & the puzzle of only occasional disasters. **Management Science**.
2. Rahmandad H, Repenning N. (2016). "Capability Erosion Dynamics." **Strategic Management Journal**. 37(4): 649-672.
3. Jalali, M. S., Sharafi-Avarzaman, Z., Rahmandad, H., & Ammerman, A. S. (2016). Social influence in childhood obesity interventions: a systematic review. **Obesity Reviews**. doi: 10.1111/obr.12420
4. Wittenborn, A., H. Rahmandad, J. Rick and N. Hosseinichimeh (2016). "Depression as a systemic syndrome: Mapping the feedback loops of major depressive disorder." **Psychological Medicine**. 46(3): 551-562.
5. Rahmandad, H. (2015). "Connecting strategy and system dynamics: an example and lessons learned." **System Dynamics Review** 31(3): 149-172.
6. Parvan, K., Rahmandad, H., & Haghani, A. (2015). Inter-phase feedbacks in construction projects. **Journal of Operations Management** 39-40: 48-62.
7. Hosseinichimeh, N., H. Rahmandad and A. Wittenborn (2015). "Modeling the hypothalamus-pituitary-adrenal axis: A review and extension." **Mathematical biosciences**. 268: 52-65.
8. Davarzani, H., R. Zanjirani-Farahani and H. Rahmandad (2015). "Understanding econo-political risks: impact of sanctions on an automotive supply chain." **International Journal of Operations & Production Management**. 35(11):1567-1591.
9. Shoham, D., R. Hammond, H. Rahmandad, Y. Wang and P. Hovmand (2015). "Modeling social norms and social influence in obesity." **Current Epidemiology Reports** 2(1): 71-79.
10. Fallah-Fini, S., K. Triantis, H. Rahmandad, C. de la Garza (2015). "Measuring dynamic efficiency of highway maintenance operations." **Omega**.50(C):18-28.
11. Rahmandad H. (2014). "Human growth and body weight dynamics: an integrative systems model." **PLoS One**. 9(12): e114609.
12. Fallah-Fini, S., H. Rahmandad, et al. (2014). "Modeling US Adult Obesity Trends: A System Dynamics Model for Estimating Energy Imbalance Gap." **American Journal of Public Health**. 104(7): 1230-1239.
13. Hall, K. D., R. A. Hammond, H. Rahmandad (2014). "Dynamic Interplay Among Homeostatic, Hedonic, and Cognitive Feedback Circuits Regulating Body Weight." **American Journal of Public Health**. 104(7): 1169-1175.
14. Fallah-Fini, S., H. Rahmandad, et al. (2013). "Connecting micro dynamics and population distributions in system dynamics models." **System Dynamics Review** 29(4): 197-215.
15. Sabounchi, N., Rahmandad, H., Ammerman, A. (2013). "Best-fitting prediction equations for basal metabolic rate: informing obesity interventions in diverse populations." **International Journal of Obesity**.37(10): 1364-1370.

16. Ip, E. H., H. Rahmandad, D. Shoham, R. Hammond, T. Huang, Y. Wang, P. Mabry (2013) "Reconciling Statistical and Systems Science Approaches to Public Health " ***Health Education & Behavior***.40(1S): 123S-131S.
17. Rahmandad, H. (2012). "Impact of growth opportunities and competition on dynamics of capability development". ***Organization Science*** 23(1): 138-154.
18. Rahmandad, H. and Sterman, J. (2012). "Reporting Guidelines for Simulation-based Research in Social Sciences." ***System Dynamics Review***, 28(4):396-411.
19. Rahmandad, H. and Sibdari, S. (2012) "Joint Pricing and Openness Decisions in Software Markets with Reinforcing Loops." ***System Dynamics Review*** 28(3):206-229.
20. Hu, K., Rahmandad, H., Smith-Jackson, T., & Winchester, W. W. (2011). Factors influencing the risk of falls in construction industry: a review of evidence. ***Construction Management and Economics***, 29(4): 397-416.
21. Rahmandad, H., K. Hu, R. Duintjer-Tebbens, K. Thompson (2011). Development of an individual-based model for polioviruses: Implications of the selection of network type and outcome metrics. ***Epidemiology and Infection***, 139(6), 836-848.
22. Zuashkiani, A., Rahmandad, H., & Jardine, A. (2011). Mapping the dynamics of overall equipment effectiveness to enhance asset management. ***Journal of Quality in Maintenance Engineering***, 17(1), 74-92.
23. Fallah-Fini, S., H. Rahmandad, et al. (2010). "Optimizing highway maintenance operations: dynamic considerations." ***System Dynamics Review*** 26(3): 216-238.
24. Rahmandad, H. and K. Hu (2010). "Modeling rework cycle: comparing alternative formulations." ***System Dynamics Review*** 26(4): 291-315.
25. Rahmandad, H., N. P. Repenning and J. D. Sterman (2009). Effect of Feedback Delays on Learning, ***System Dynamics Review***, 25(4): 309-338.
26. Rahmandad, H. and D. Weiss (2009). Dynamics of concurrent software development. ***System Dynamics Review*** 25(3): 224-249.
27. Rahmandad, H. (2008). "Effect of delays on complexity of organizational learning." ***Management Science*** 54(7): 1297-1312.
28. Rahmandad, H. and J. Sterman (2008). "Heterogeneity and network structure in the dynamics of diffusion: Comparing agent-based and differential equation models." ***Management Science*** 54(5): 998-1014.

### 3. Articles in Refereed Conference Proceedings

1. Rahmandad, H., & Hashemian, M. (2016). *Endogenous Capability Building and Start-up Advantage in New Markets*. Paper presented at the Strategic Management Society Meeting, Berlin, Germany.
2. Rahmandad, H., & Vakili, K. (2016). *Funding and the Organization of Scientific Work*. Paper presented at the Academy of Management, Anaheim, CA.
3. Rahmandad, H., & Hashemian, M. (2016). *Endogenous Capability Building and Start-up Advantage in New Markets*. Paper presented at the International System Dynamics Conference, Delft, Netherlands.
4. Rahmandad, H., & Vakili, K. (2016). *Funding and the Organization of Scientific Work*. Paper presented at the DRUID, Copenhagen, Denmark.
5. Jalali M., Rahmandad H., (2015). Design, communication, and erosion of

- organizational capabilities. Strategic Management Society Meeting, Denver, CO
6. Rahmandad, H., Repenning, N., & Henderson, R. (2015). Making the Numbers? "Short termism" & the puzzle of only occasional disasters. Academy of Management Meeting, Vancouver.
  7. Hosseinichimeh N., Rahmandad H., Jalali M., Wittenborn A., (2015) Estimating System Dynamics Models Using Indirect Inference, International System Dynamics Conference. Cambridge, MA.
  8. Rahmandad, H., Repenning, N., & Henderson, R. (2015). Making the Numbers? "Short termism" & the puzzle of only occasional disasters. International System Dynamics Conference. Cambridge, MA.
  9. Ashouri-Rad, A., H. Rahmandad, (2014). Dynamics of Online Communities. International System Dynamics Conference. Delft, Netherlands.
  10. Fallah-Fini, S., H. Rahmandad, R. Bures, T. Huang, T. Glass (2014). Energy imbalance underlying childhood obesity, International System Dynamics Conference. Delft, Netherlands.
  11. M. Jalali, H. Rahmandad, S. Bullock, A. Ammerman, (2014). Dynamics of Intervention Adoption, Implementation and Maintenance International System Dynamics Conference. Delft, Netherlands.
  12. N. Hosseini, H. Rahmandad, A. Wittenborn, (2014). Modeling HPA axis International System Dynamics Conference. Delft, Netherlands.
  13. Ashouri-Rad, A., H. Rahmandad, (2013). Reconstructing Online Behaviors by Effort Minimization, Proceedings of international Conference on Social Computing, Behavioral-Cultural Modeling, & Prediction (SBP13). Pages 75-82, Washington, DC.
  14. Fallah-Fini, S., H. Rahmandad, Y. Wang (2013). Connecting micro dynamics and population distributions in system dynamics models, International System Dynamics Conference. Cambridge, MA. (Online, Not paginated pp.1-23)
  15. Rahmandad, H., M. Jalali, H. Ghodusi (2013). Estimation of Unknown Parameters in Dynamic Models Using the Method of Simulated Moments (MSM) International System Dynamics Conference. Cambridge, MA. (Online, Not paginated pp.1-7)
  16. Parvan, K., H. Rahmandad, A. Haghani (2013). Empirical Study of Design-Construction Feedbacks in Building Construction Projects International System Dynamics Conference. Cambridge, MA. (Online, Not paginated pp.1-33)
  17. Bandari, R., H. Rahmandad, V.P. Roychowdhury (2013). Blind Men and the Elephant: Detecting Evolving Groups In Social News. International AAI Conference on Weblogs and Social Media. Cambridge, MA. (Online, Not paginated pp.1-20)
  18. Rahmandad, H. (2013). Understanding the Differences Among Academic Disciplines, Academy of Management Meeting, Buena Vista, FL.
  19. Rahmandad, H. and N. Sabounchi (2012). Modeling and Estimating Individual and Population Obesity Dynamics. Proceedings of international Conference on Social Computing, Behavioral-Cultural Modeling, & Prediction (SBP12). Pages 206-313, University of Maryland, College Park, MD.
  20. Rahmandad, H. (2012). Modeling the dynamics of human body growth and maintenance International System Dynamics Conference. Saint Gallan, Switzerland. (Online, Not paginated pp.1-12)
  21. Rahmandad, H. and J. Sterman (2012). Reporting Guidelines for Simulation-based Research in Social Sciences International System Dynamics Conference. Saint Gallan, Switzerland. (Online, Not paginated pp.1-16)
  22. Parvan, K., H. Rahmandad, et al. (2012). Estimating the impact factor of undiscovered design errors on construction quality International System Dynamics Conference. Saint



- Gallan, Switzerland. (Online, Not paginated pp.1-13)
23. Ip, E. H., M. Wolfson, et al. (2012). Agent-based modeling of College Drinking Behavior and mapping feedback mechanisms of alcohol reduction using both environmental and individual-based intervention strategies. International System Dynamics Conference. Saint Gallan, Switzerland. (Online, Not paginated pp.1-20)
  24. Rahmandad, H. and N. Sabounchi, Building and estimating a dynamic model of weight gain and loss for individuals and populations, in International System Dynamics Conference. July 24-28 2011: Arlington, VA. (Online, Not paginated pp.1-29)
  25. Rahmandad, H. and M. Mahdian, Modeling polarization dynamics in online communities, in International System Dynamics Conference. July 24-28 2011: Arlington, VA. (Online, Not paginated pp.1-16)
  26. Triantis, K., H. Rahmandad, and W. Vaneman, Systems Engineering: Have we lost our competitive edge? A consideration of the dynamics of systems engineering projects, in International System Dynamics Conference. July 26-29 2009: Albuquerque. (Online, Not paginated pp.1-22)
  27. Rahmandad, H. and T. Ratnarajah, Deciding on software pricing and openness under competition, in International System Dynamics Conference. July 26-29 2009: Albuquerque. (Online, Not paginated pp.1-18)
  28. Hu, K., H. Rahmandad, T. Smith-Jackson, and W.W. Winchester, Factors influencing risk of falls: A review of evidence in construction, in The First International ISOES Symposium on Construction Safety and Health. June 11-12 2009: Dallas, TX. (Online, Not paginated pp.1-25)
  29. Rahmandad, H. and T. Ratnarajah, Modeling rework cycle: Comparing alternative formulations, International System Dynamics Conference. July 20-24 2008: Athens, Greece. (Online, Not paginated pp.1-37)
  30. Rahmandad, H. and S. Fallah-Fini, Learning control policies in system dynamics models, in International System Dynamics Conference. July 20-24 2008: Athens. (Online, Not paginated pp.1-21)
  31. Rahmandad, H., Dynamics of organizational capabilities and firm adaptation, in Academy of Management Conference. August 3-8 2007, Academy of Management: Philadelphia. (CD, Not paginated pp.1-33)
  32. Rahmandad, H., Why myopic policies persist? Impact of growth opportunities and competition, in International System Dynamics Conference. July 29-August 2 2007, System Dynamics Society: Boston. (Online, Not paginated pp.1-22)
  33. Rahmandad, H. and N.P. Repenning. Dynamics of multi-release new product development, in Academy of Management Conference. August 11-16 2006. Atlanta. (CD, Not paginated pp.1-44)
  34. Rahmandad, H., Effect of delays on complexity of organizational learning, in Academy of Management Meeting. August 11-16 2006: Atlanta. (CD, Not paginated pp.1-5)
  35. Rahmandad, H. Heterogeneity and network structure in the dynamics of contagion: Comparing agent-based and differential equation models, in Academy of Management Meeting. August 5-10 2005. Hawaii. (CD, Not paginated pp.1-34)
  36. Rahmandad, H. Heterogeneity and network structure in the dynamics of contagion: Comparing agent-based and differential equation models, in The 22nd International Conference of the System Dynamics Society. July 25-29 2004. Oxford, England: System Dynamics Society. (CD & Online, Not paginated pp.1-32)
  37. Rahmandad, H., N.P. Repenning, and J.D. Sterman. Learning from experience with delayed feedback, in Proceedings of Academy of Management. August 1-6 2003. Seattle: Academy of Management. (CD, Not paginated pp.1-37)

38. Rahmandad, H., N.P. Repenning, and J.D. Sterman. Learning from experience with delayed feedback, in Proceedings of the 20th International Conference of the System Dynamics Society. July 28-August 1 2002. Palermo, Italy: The System Dynamics Society.(CD & Online, Not paginated pp.1-38)
39. Rahmandad, H. and J.V.d. Cunha. Tightening the Iron Cage or path dependence in norm formation? A system dynamics approach, in the 19th International Conference of the System Dynamics Society. July 23-27 2001. Atlanta, Georgia: System Dynamics Society. (CD & Online, Not paginated pp.1-23)
40. Rahmandad, H. and M.S. Pazhooh. A system dynamics approach to organization design: Case of talented students' center In Sharif University of Technology, in 18th International Conference of the System Dynamics Society. August 6-10 2000. Bergen, Norway: System Dynamics Society. (CD & Online, Not paginated pp.1-15)
41. Rahmandad, H. Developing a model for paradigm shift in service industry, in 18th International Conference of the System Dynamics Society. August 6-10 2000. Bergen, Norway: System Dynamics Society. (CD & Online, Not paginated pp.1-20)

#### **4. Articles in Non-Refereed Conference Proceedings**

1. Rahmandad, H., & Hashemian, M. (2016). *Endogenous Capability Building and Start-up Advantage in New Markets*. Paper presented at the Theoretical Organization Models conference, Cambridge, MA.
2. Rouleau, E., Ingram, J., Subramaniam, S., Rick, J., Hosseinichimeh, N., Rahmandad, H., & Wittenborn, A.K. (2016, September). *Testing the validity of a model of depression dynamics*. Presented at the annual meeting of the American Association for Marriage and Family Therapy, Indianapolis, Indiana.
3. Hashemian, M., H. Rahmandad (2016). Endogenous growth and the start-up advantage, Winter Organization Science Conference, Park City, Utah
4. Karanfil, O., J. Sterman and H. Rahmandad (2015). A DYNAMIC MODEL OF PROSTATE SPECIFIC ANTIGEN (PSA) SCREENING FOR PROSTATE CANCER: ANATOMY OF A MEDICAL DECISION. 37th Annual Meeting of the Society for Medical Decision Making. St. Louis, MO.
5. Wittenborn, A. Rick, J., Hosseinichimeh, N., & Rahmandad, H. (2015). Examining the systemic complexity of unipolar depression, Innovations In Collaborative Modeling, Michigan State University
6. Wittenborn, A. Rick, J., Hosseinichimeh, N., & Rahmandad, H. (2015). Understanding depression as a systemic syndrome. Accepted to be presented at the annual meeting of the American Association for Marriage and Family Therapy, Austin, Texas.
7. Wittenborn, A., Rick, J., Hosseinichimeh, N., & Rahmandad, H. (2015). Modeling feedback effects in adult depression. Accepted to be presented at the annual meeting of the American Psychological Association, Toronto, Ontario, Canada.
8. Rahmandad (2014). A Model of Human Growth and Body Weight Dynamics, INFORMS Annual Meeting, November 9-12 2014, San Francisco, CA
9. Fallah-fini S., Rahmandad H., Bures R., Huang T., (2014) A System Dynamics Model for Estimating the Energy Imbalance Among US Children, INFORMS Annual Meeting, November 9-12 2014, San Francisco, CA
10. Rahmandad H., Jalali M., Paynabar K.(2014) Aggregation of Statistical Findings, Case Study: BMR Estimation Models, White Males 8-18 Years Old, INFORMS Annual Meeting, November 9-12 2014, San Francisco, CA
11. Jalali M., Ammerman A., Bullock S., Rahmandad H. (2014) Dynamics of Obesity

- Interventions inside Organizations, INFORMS Annual Meeting, November 9-12 2014, San Francisco, CA
12. Wernz C., Baghaei A., Rahmandad H., Rojas-Cordova A., Slonim A., Zhang H. (2014) Improving Investment Decisions at Hospitals through System Dynamics and Decision Analysis, INFORMS Annual Meeting, November 9-12 2014, San Francisco, CA
  13. Rahmandad H., Jalali M., Paynabar K. (2014) Quantitative Aggregation of Prior Statistical Findings, INFORMS Annual Meeting, November 9-12 2014, San Francisco, CA
  14. Rahmandad (2013). Exploration exploitation in online browsing. Carnegie School of Organizational Learning Conference. Asilomar, CA.
  15. Nikkhoo, P., A.R. Sanderford, A.P. McCoy, C.T. Koebel, C. Franck, H. Rahmandad (2013). Adoption of Innovative Products in the US Housing Industry: Builders' Practices over 15 years. Residential Building Design and Construction Conference. Bethlehem, PA.
  16. Rahmandad, H. (2013). Estimating a population model of weight dynamics using the method of simulated moments. Joint Statistical Meetings, Montreal, Canada.
  17. Rahmandad, H., & Sabounchi, N. Building and estimating dynamic models of obesity, in Institute for Operations Research and the Management Sciences (INFORMS) Annual Meeting. November 13-18 2011: Charlotte, NC.
  18. Bandari, R., & Rahmandad, H. Identifying communities in online social news websites, in INFORMS Annual Meeting. November 13-18 2011: Charlotte, NC.
  19. Rahmandad, H., & Sabounchi, N. System dynamics modeling for overweight and obesity-relevant policy analysis, in System Dynamics Winter Camp. January 7-8 2011: Austin, TX.
  20. Rahmandad, H., & Sabounchi, N. System dynamics modeling for obesity, in Modeling for Public Health Action: From Epidemiology to Operations. December 9-10 2010: Atlanta, GA.
  21. Hu, K., Rahmandad, H., Duintjer Tebbens, R., & Thompson, K. An agent-based model of poliovirus transmission, in INFORMS Annual Meeting. November 7-10 2010: Austin, TX.
  22. Hu, K, Rahmandad H, Duintjer Tebbens RJ, Thompson KM, "An agent-based model to explore network impact on poliovirus transmission", in proceedings of the Industrial Engineering Research Conference. June 5-9 2010: Cancun, Mexico.
  23. Rahmandad, H. and S. Aral, Software pricing and openness under competition, in INFORMS Annual Meeting. October 11-14 2009: San Diego.
  24. Rahmandad, H., How delays complicate organizational learning, in INFORMS Annual Meeting. October 11-14 2009: San Diego.
  25. Hu, K., H. Rahmandad, T. Smith-Jackson, and W.W. Winchester, Factors influencing risk of falls: A review of evidence in construction, in Industrial Engineering Research Conference. May 30-June 3 2009: Miami, FL.
  26. Rahmandad, H. and S. Fallah-Fini, Learning control policies in system dynamics models, in INFORMS Annual Meeting. October 12-15 2008: Washington DC.
  27. Rahmandad, H. and T. Ratnarajah, Modeling rework cycle: Comparing alternative formulations, INFORMS Annual Meeting. October 12-15 2008: Washington DC.
  28. Rahmandad, H. and J.D. Sterman. Heterogeneity and network structure in the dynamics of contagion: Comparing agent-based and differential equation models, in North American Association for Computational Social and Organization Science (NAACSOS) Conference. June 27-29 2004: Pittsburgh.

29. Rahmandad, H., N.P. Repenning, and J.D. Sterman. Effects of feedback delays on learning, in NAACSOS Conference. June 22-25 2003: Pittsburgh.

## **5. Papers/Articles in Progress or Under Review**

1. Ashouri-Rad, A., & Rahmandad, H. Reconstructing online behaviors by effort minimization. Working Paper.
2. Hosseinichimeh, N., Rahmandad, H., Jalali, M., & Wittenborn, A. (Under Review). Estimating System Dynamics Models Using Indirect Inference. System Dynamics Review.
3. Jalali, M., & Rahmandad, H. Design, communication, and the erosion of organizational capabilities. Working Paper.
4. Rahmandad, H., Jalali, M., & Paynabar, K. (Under Review) Quantitative aggregation of prior statistical findings. Nature.
5. Rahmandad, H., & Vakili, K. Publication maximizing scientists and impact of funding on the organization of science. Working Paper.
6. Rahmandad, H., & Hashemian, M. *Endogenous Capability Building and Start-up Advantage in New Markets*. Working Paper.

## **6. Other Publications**

### **Book**

1. Rahmandad, H., Oliva, R. & Osgood, N. (2015), Analytical methods for dynamic modelers. Cambridge: MIT Press.

### **Book Chapters**

1. Jalali, M., Rahmandad, H., & Ghodduzi, H. (2015). Using the method of simulated moments for system identification. In H. Rahmandad, R. Oliva & N. Osgood (Eds.), Analytical methods for dynamic modelers. Cambridge: MIT Press.
2. Rahmandad, H. and R. Spiteri (2015). Modeling competing actors using differential games. Analytical methods for dynamic modelers. H. Rahmandad, R. Oliva and N. Osgood. Cambridge, MIT Press.

## **7. Technical Reports**

1. Rahmandad, H., J. Moffat, G.O. Barney, L. Frerichs, A.M. Bassi, A. Cione, C. Nelson, and V. Ramachandran, "The model assessment report for Youth Earth Plan," 2008, Our Task: Arlington, VA. (30 pages)

## **XVI. Invited Oral Presentations**

1. Invited Speaker, Delft Institute of Technology, June 2016, Funding and the organization of scientific work.
2. MIT Operations Management Seminar, Fall 2015, Quantitative aggregation of prior statistical findings
3. Invited Plenary, International System Dynamics Conference, July 2015, Capability Erosion Dynamics
4. Invited Speaker, Sharif University of Technology, June 2015, Two seminars on structure of academic disciplines and generalized model aggregation method
5. MIT-Harvard Economic Sociology Seminar, April 2015, Opinion Dynamics in Online

## Communities

6. MIT Organization Studies Seminar, Fall 2014, Capability Erosion Dynamics
7. MIT Organizational Economic Seminar, Fall 2013, Capability Erosion Dynamics
8. Invited Speaker, University of Minnesota, April 2012, Modeling obesity
9. Invited keynote speaker, International Management Conference, Dec 11, Tehran, Iran. Talk Title: "A global perspective on management education". One of the 5 keynote speakers for a conference with an audience of >1000.
10. Invited Speaker, Sharif University of Technology, December 2011, Two talks on business education and modeling obesity.
11. Invited speaker, National Collaborative on Childhood Obesity Research (NCCOR) Quarterly Meeting, Jan 2012, Talk title: "System dynamics modeling of childhood obesity trends".
12. Invited speaker, National Collaborative on Childhood Obesity Research (NCCOR) Quarterly Meeting, July 2012, Talk title: "System dynamics modeling of childhood obesity trends".
13. Invited speaker, NIH Symposium on systems modeling applications, July 2011, Bethesda, MD .
14. Invited keynote speaker, International Management Conference, Dec 2010, Tehran, Iran. Talk Title: "Product pricing in markets dominated with reinforcing loops". One of the 5 keynote speakers for a conference with an estimated attendance of >1000. Invited Speaker, Sharif University of Technology, December 2010, Two talks on heterogeneity of academic disciplines and modeling obesity.
15. Invited Speaker, Virginia Tech, ISE INFORMS Talk, March 2010
16. Invited Session Chair, Introduction to system dynamics methodology, Winter Simulation Conference 2010, Baltimore, MD.
17. Invited speaker, National Collaborative on Childhood Obesity Research (NCCOR) Quarterly Meeting, July 10, Bethesda. Talk title: System dynamics modeling of childhood obesity trends .
18. Invited speaker, Socially Coupled Systems and Informatics Workshop, July 10, Alexandria. Talk title: Sensitivity analysis to inform modeling for policy applications .
19. Virginia Tech, ISE INFORMS Talk, March 2010.
20. Invited Speaker, Virginia Tech Northern Virginia Center, February 2010.
21. Invited speaker, NIH Workshop on Systems Methods for Developmental Science, Oct 09, Ann Arbor. Talk title: Introduction to systems methodologies for developmental sciences
22. Invited panel participant, INFORMS, Oct 09, San Diego. Talk title: The impact of delays on organizational learning.
23. Invited speaker, NIH Workshop on Environmental Systems of Public Health, Sep 08, Bethesda. Talk title: Introduction to systems methodologies for health policy analysis
24. Invited speaker at Massachusetts Institute of Technology; Talk Title: Capability development and erosion dynamics, October 2008.
25. Opening plenary presentation at the International System Dynamics Conference, July 2007, Boston. Paper title: "Why myopic policies persist? Impact of growth opportunities and competition."
26. Invited keynote speaker, International Management Conference, Dec 2006, Tehran, Iran. Talk Title: "Dynamics of organizational capabilities." Estimated conference attendance: 900.

27. Discussant, Booz Allen Hamilton Workshop on Systems Dynamics Modeling of Physical and Social Systems for National Security, Chantilly, VA, April 2005
28. University of Pennsylvania, Wharton School of Management, January 2006. Talk Title: Dynamics of multiple release new product development.
29. Stanford University, Management Science and Engineering Department, February 2006. Talk Title: Dynamics of multiple release new product development.
30. Virginia Polytechnic Institute and State University, March 2006. Talk Title: Dynamics of multiple release new product development.
31. University of Toronto, April 2006. Talk Title: Dynamics of multiple release new product development.
32. University of Massachusetts, Amherst, April 2006. Talk Title: Dynamics of multiple release new product development.
33. Invited speaker, International Association of Product Development workshop on Managing the Product Development Pipeline, Marlboro, MA, October 2004. Talk Title: Dynamics of multiple release new product development.