Leili Soltanisehat

U.S. Permanent Resident

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CURRENT POSITION

Visiting Assistant Professor, University of Tulsa (2021-current)

EDUCATION

Ph.D. Industrial and Systems Engineering (2018-2022)
University of Oklahoma, School of Industrial and Systems Engineering, OK, USA
Dissertation topic: Risk Analysis of Cyber-Physical Systems, Emphasis on the Healthcare Systems and Pandemic Risk
Advisor: Dr. Kash Barker

Graduate Certificate in Data Science (2019-2020)
University of Oklahoma, Data Science and Analytics Institute, OK, USA

M.E.M. Engineering Management and Systems Engineering (2016-2018)
Old Dominion University, Department of Engineering Management and Systems Engineering, VA, USA

M.S. Industrial and Systems Engineering (2011-2013)
Bu-Ali Sina University, Iran

B.S. Industrial Engineering (2007-2011)
Bu-Ali Sina University, Iran

RESEARCH INTERESTS

Methodological domains: Analytics, operations research, simulation
Impact domains: Healthcare, supply chain, logistics, critical infrastructure, blockchain technology, energy

PEER-REVIEWED PUBLICATIONS

1. Bourgeois, C. M., **Soltanisehat, L.,** Barker, K., & González, A. D. (2023). Risk-based inventory scheduling framework to fulfill multi-product orders within a production network. Computers & Industrial Engineering, 182, 109343.

2. **Soltanisehat. L**., Barker, K., González, A. Multi-regional, Multi-industry Impacts of Fairness in Pandemic Policies. Risk Analysis.

3. **Soltanisehat. L.,** Barker, K., Gonzalez, A. Modeling Social, Economic, and Health Perspectives for Pandemic Policy Decision-making. Socio-economic Planning Sciences.

4. **Soltanisehat, L.,** Ghorbani-Renani, N., González, A. D., & Barker, K. (2023). Assessing production fulfillment time risk: application to pandemic-related health equipment. International Journal of Production Research, 61(24), 8401-8422.
   Impact Factor: 8.56

1. Torkayesh, A. E., Alizadeh, R., **Soltanisehat, L.**, Torkayesh, S. E., & Lund, P. D. (2022). A comparative assessment of air quality across European countries using an integrated decision support model. Socio-Economic Planning Sciences, 81, 101198.
   Impact Factor: 4.9

2. **Soltanisehat, L.** Alizadeh, R., Hao, H., Choo, KK. (2020). Technical, Temporal, and Spatial Research Challenges and Opportunities in Blockchain-Based Healthcare: A Systematic Literature Review. Accepted in *IEEE Transactions on Engineering Management*.
   Impact Factor: 6.15

3. Badré, A., Mohebbi, S., **Soltanisehat, L.** (2020). Secure Decentralized Decisions to Enhance Coordination in Consolidated Hospital Systems. *IISE Transactions on Healthcare Systems Engineering*, Vol. 10, No. 2, pp. 99-112.

4. Alizadeh, **Soltanisehat, L.,** Lund, P. D., and Zamanisabzi, H. (2020). Improving renewable energy policy planning and decision-making through a hybrid MCDM method. Accepted in *Energy Policy*.
   Impact Factor: 6.14

5. Alizadeh, R., **Soltanisehat, L**. (2020). Stay Competitive in 2035: A Scenario-based Method to Foresight in the Design and Manufacturing Industry. *Foresight*, Vol. 22, No. 3, pp. 309-330.

6. Alizadeh, R., **Soltanisehat, L.,** Lund, PD. (2020). Outlook on biofuels in future studies: A systematic literature review. Accepted in *Renewable and Sustainable Energy Reviews*.
   Impact Factor: 14.98.

7. **Soltanisehat. L.,** Mehregan. N. (2019). Research and Development Investment and Productivity Growth in Firms with Different Levels of Technology. *Iranian Economic Review*, Vol. 23, No. 4, pp. 795-818.

8. Zamani Sabzi, H., Abudu, S., Alizadeh, R., **Soltanisehat, L.,** Dilekli, N., King, J.P. (2018). Integration of Time Series Forecasting in a Dynamic Decision Support System for Multiple Reservoir Management to Conserve Water Sources. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, Vol. 40, No. 11, pp. 1398-1416.
   Impact Factor: 3.45

9. Gheorghe, P., **Soltanisehat. L.** (2018)**.** A New Structure for the Music Industry - Blockchain Technology. *FAIMA Business & Management Journal*, Vol. 6, No. 3, pp. 51-61.

CONFERENCE PRESENTATIONS

1. **Soltanisehat. L.,** Barker, K., Gonzalez, A. (2022). Optimal Production and Inventory Scheduling to Minimize Multi-Product Order Fulfillment Risk. *INFORMS Annual Meeting,* IN, USA.

2. **Soltanisehat. L.,** Barker, K., Gonzalez, A. (2022). Fulfillment Time Risk Assessment-Application to Health Equipment Production. *POMS, FL,* USA.

3. **Soltanisehat. L.,** Barker, K., Gonzalez, A. (2022). Fulfillment Time Risk Assessment-Application to Health Equipment Production. *IISE, WA,* USA.

4. **Soltanisehat. L.,** Barker, K., Gonzalez, A. (2021). Modeling Social, Economic, and Health Perspectives for Pandemic Policy Decision-making. *INFORMS Annual Meeting*, CA, USA.

5. **Soltanisehat. L.,** Mohebbi. S., Nicholson, Ch. (2019). Socio-Spatial Vulnerability Analysis of Interdependent Critical Infrastructures. *INFORMS Annual Meeting*, WA, USA.

6. **Soltanisehat. L.,** Mohebbi. S. (2018). Capturing the Socio-spatial Vulnerability Index of the Interdependent Critical Infrastructures. *IISE,* FL, USA.

7. Badre. A., Mohebbi. S., **Soltanisehat. L.** (2018). Secure Decentralized Decisions in Consolidated Hospital Systems. *INFORMS Annual Meeting,* AZ, USA.

8. **Soltanisehat. L.,** Alla. S. Centralized or Distributed IT system? Blockchain Technology Concept. (2018). *Proceedings of the International Annual Conference of the American Society for Engineering Management,* AL, USA.

9. Al-Megren. Sh., Alsalamah. Sh., Altoaimy. L., Alsalamah. H., **Soltanisehat. L.,** Almutairi. E., and, Pentland. A. (2018). Blockchain Use Cases in Digital Sectors: A Review of the Literature. *IEEE Conference on Internet of Things,* Halifax, CA.

10. Alla. S., **Soltanisehat. L.,** Tatar. U., Omer. K. (2018). Blockchain Technology In Healthcare. *IISE,* Fl, USA.

11. Alla. S., **Soltanisehat. L.,** Taylor, A. (2018). A Comparative Study of Various AI-Based Breast Cancer Detection Techniques. *International Conference on Complex Systems,* MA, USA.

12. **Soltanisehat. L.,** Gheorghe, A. Blockchain Technology and Cyber Security. (2017). *INFORMS Annual Meeting,* TX, USA.

TEACHING INTERESTS

Business Analytics
Operations Management
Business Statistics
Operations Research
Business Data Analytics with Tableau, R, Python
Business System Simulation with Anylogic, Netlogo, ARENA, Python, and R
Linear and Integer Programming with Cplex or Gurobi

TEACHING EXPERIENCE AND CURRICULUM DEVELOPMENT

University of Massachusetts Dartmouth, Charlton College of business (2023-current)

1. Business Statistics (POM 212- Spring 2024)
2. Business Statistics (POM 212- Fall 2023)

University of Tulsa, Collins School of Business, OK, USA (2021-2022)

3. Operations Management (QM 3023-1,3, Spring 2023, 25 undergraduate students)
4. Operations Management (QM 3023-3, Spring 2023, 10 undergraduate students)
5. Business Analytics/ Statistics I (QM 2013-1, Fall 2022, 17 undergraduate students)
6. Business Analytics/ Statistics I (QM 2013-2, Fall 2022, 29 undergraduate students)
7. Business Analytics/ Statistics I (QM 2013-3, Fall 2022, 31 undergraduate students)
8. Operations Management (MBA 7033-1, Summer 2022, 23 graduate students)
9. Operations Management (QM 3023-1, Spring 2022, 20 undergraduate students)
10. Operations Management (QM 3023-3, Spring 2022, 15 undergraduate students)
11. Statistics II (QM 2023, Spring 2022, 15 undergraduate students)
12. Operations Management (QM 3023-1, Fall 2021, 25 undergraduate students)
13. Operations Management (QM 3023-2, Fall 2021, 27 undergraduate students)

University of Oklahoma, School of Industrial and Systems Engineering, OK, USA (2018)

14. Fundamentals of Engineering Statistical Analysis (ISE3293/DSA5013, Fall 2018, Teaching assistant, 130 undergraduate students)

Old Dominion University, Department of Engineering Management and Systems Engineering, VA, USA (2017-2019)

15. Multi-Criteria Decision Analysis and Decision Support Systems (ENMA712, Fall 2017, Guest lecturer, 10 graduate students)
16. Complexity, Engineering, and Management (ENMA751, Fall 2018, Guest lecturer, 8 graduate students)
    Financial Engineering (ENAM705, Spring 2019, Guest lecturer, 10 graduate students)

MENTORSHIP EXPERIENCE

1. **Adrian Badre**, M.S. student
   University of Oklahoma, School of Industrial and Systems Engineering
   Thesis title: Secure Decentralized Decisions in Consolidated Hospital Systems

2. **Chris Bourgeois,** M.S. student

University of Oklahoma, School of Industrial and Systems Engineering
Thesis title: Inventory Scheduling Framework to Fulfill Multi-product Orders within an Interconnected Production Network

PROFESSIONAL SKILLS

Programming: Python, R, Java, AMPL, Matlab, HTML
Data Analysis: Tableau, Weka, Eviews, Stata
Simulation: AnyLogic, Netlogo, Vensim, ARENA
GIS: ArcGIS
Decision Making: Super Decision
Other: Office, Visio, AutoCAD, Indesign, Photoshop
Languages: Persian, English, Azerbaijani, Turkish, Arabic

SERVICE EXPERIENCE

1. Officer, INFORMS Subdivision Council (2020-present)
2. Vice President, OU INFORMS Student Chapter (2020-2021)
3. Leadership Team Member, OU INFORMS Student Chapter (2019-2020)
4. Leadership Team Member, ODU ISAB-International Student Advisory Board (2017-2018)
5. Officer, ODUPERSIA-Persian Student Association (2017-2018)

REVIEW EXPERIENCE

Annals of Operations Research
IEEE Transactions on Engineering Management
IISE Transaction on Operations Engineering
IEEE Transactions on Engineering Management
Journal of Parallel and Distributed Computing
IEEE Transactions on Industrial Informatics

HONORS, AWARDS, and SCHOLARSHIP

1. GCoE Dissertation Excellence Award, Gallogly College of Engineering, University of Oklahoma (2022)
2. Director's ISE Scholarship, Gallogly College of Engineering, University of Oklahoma (2021)
3. Dorothy Grace Barkow Scholarship, Women in Engineering Program, Gallogly College of Engineering, University of Oklahoma (2020)
4. Director's ISE Scholarship, Gallogly College of Engineering, University of Oklahoma (2020)
5. Cloe Cross Scholarship, Gallogly College of Engineering, University of Oklahoma (2020)
6. Graduate Student Senate Travel Grant, Graduate College, University of Oklahoma (2019)
7. Wethington Fellowship, Graduate College, University of Oklahoma (2018)
8. Ph.D. Recruitment Excellence Fellowship (PREF), Gallogly College of Engineering, University of Oklahoma (2018)
9. Level A Certificate on English Communication Capacity (ECC) Test (2018)
10. GA Rookie Award, Department of Engineering Management and Systems Engineering, Old Dominion University, 2018.
11. Scholarship of NECSI Winter School on Complex Systems at MIT, Cambridge (2018)
12. Scholarship of 4th System Dynamics Summer School at MIT, Cambridge (2017)

WORK EXPERIENCE

1. Quality Control Assistant, Arian Electric Gharb Co. (2013-2015)
2. Manager Assistant, Arian Electric Gharb Co. (2010-2013)
3. Editor of SANA magazine, Department of Industrial Engineering, Bu Ali-Sina University (2009-2010)

WORKSHOPS

1. Programming for Complex Systems, NECSI Winter School on Complex Systems at MIT, USA (2018)
2. Concepts & Modeling, NECSI Winter School on Complex Systems at MIT, USA (2018)
3. Data Analytics, NECSI Winter School on Complex Systems at MIT, USA (2018)
4. Networks and Data Analytics, NECSI Winter School on Complex Systems at MIT, USA (2018)
5. System Dynamics Modeling Principles, System Dynamics Society at MIT, USA (2017)
6. System Dynamics Modeling Software, System Dynamics Society at MIT, USA (2017)
7. ASQ Knowledge Certificate, Old Dominion University, USA (2017)
8. Graduate Teaching Assistant Instructor, Old Dominion University, USA (2016)
9. SME Management, Department of Education, Ministry of Commerce and Industry, Iran (2010)
10. ISO 19011 Internal Audit, Industrial Training, and Research Center, Iran (2009)
11. ISO 9001:2008 Industrial Training and Research Center, Iran, 2009.
12. EFQM, Department of Industrial Engineering, Bu Ali-Sina University, Iran (2008)
13. Knowledge Management, Industrial Training, and Research Center, Iran (2008.
14. Strategic Management, Industrial Engineering Association, Iran (2007)

PROFESSIONAL AFFILIATION

INFORMS-Institute for Operations Research and the Management Sciences (2017-present)
Engineering Diversity and Inclusion at OU (2020-2022)
Institute of Industrial and Systems Engineers (2019-2022)
INFORMS OU Student Chapter leadership team (2019-2022)
INFORMS Subdivision Council (2019-2021)
Risk-Based Systems Analytics Laboratory at OU (2018-2022)

REFERENCES

Reference available upon request