Ehsan Nikbakhsh

CONTACT INFORMATION	Room 205, Faculty of Industrial & Systems Engineering, Tarbiat Modares University	E-mail:
	Jalal Ale Ahmad Highway, P.O. Box: 14115-138	nikbakhsh@modares.ac.ir
	Tehran, Iran	WWW:
	Tel: +98 21 8288 4932, Fax: +98 21 8288 4393	www.modares.ac.ir/~nikbakhsh
		lnkdin.me/ehsan

EMPLOYMENT

Tarbiat Modares University, Tehran, Iran

- *Assistant Professor of Industrial & Systems Engineering*, **May 2016-Present**

- *Deputy Manager of the Central Office of the Strategic Change Plan*, **July 2017-Present**

- *Executive Manager of the Strategic Change Plan in the Office of Academic Affairs*, **Sep. 2016-Feb. 2019**

EDUCATION

Tarbiat Modares University, Tehran, Iran

Ph.D., Industrial Engineering, 2014
- Area of Study: Industrial Engineering
- Dissertation Title: *Hub Networks under Disruption and Static Competition: Models and Algorithms*
- Advisor: Prof. Seyed Hessameddin Zegordi
- Co-advisors: Prof. Mohammad Modarres, and Prof. Isa Nakhai Kamalabadi

M.Sc., Industrial Engineering, 2008
- Area of Study: Socio-Economic Systems Engineering
- Thesis Topic: *Solving the Two-Echelon Location-Routing Problem with Stochastic Customer Transportation Times and Soft Time Window Constraints*
- Advisor: Prof. Seyed Hessameddin Zegordi
- Co-advisor: Prof. Mohammad Mehdi Sepehri

Golpayegan University of Technology and **Sharif University of Technology**, Golpayegan, Iran

B.Sc., Industrial Engineering, 2005
- Area of Study: Industrial Production
- Member of the IE Academic Student Body, Sep. 2003-Sep. 2004

INTERESTS

Research: Discrete Facility Location, Network Design, Logistics and Supply Chain Management, Transportation Systems, Integer Programming, Stochastic Programming, Robust Optimization, and Applications of Operations Research.

Teaching: Stochastic Optimization, Supply Chain Network Design, Design and Analysis of Logistics Systems, and Forecasting and Time Series Analysis.

REFEREED JOURNAL PUBLICATIONS

[1] Ghorashi Khalilabadi, S.M., Zegordi, S.H. **Nikbakhsh, E.**, (2020) A multi-stage stochastic programming approach for supply chain disruption mitigation via product substitution. *Computers & Industrial Engineering*, 149: 106786.

[2] Khajepour, A., Sheikhmohammadi, M., **Nikbakhsh, E.**, (2020) Field path planning using capacitated arc routing problem. *Computers and Electronics in Agriculture*, 173: 105401.

[3] Zetina, C.A., Contreras, I., Cordeau, J.-F., **Nikbakhsh, E.**, (2017) Robust uncapacitated hub location. *Transportation Research Part B: Methodological*, 106: 393-410.

[4] Asgari, N., **Nikbakhsh, E.**, Hill, A., Farahani, R.Z., (2016) Supply chain management 1982-2015: a review. *IMA Journal of Management Mathematics*, 27(3): 353-379.

[5] Babaee, L., Rabieh, M., **Nikbakhsh, E.**, Esmaeili, M., (2016) A multi-objective mathematical model for green supplier selection - case study: supply chain of IRAN KHODRO Co. (In Persian). *Modern Researches in Decision Making*, 2(2): 51-83.

[6] Hasani, A.A., Zegordi, S.H., **Nikbakhsh, E.**, (2015) Robust closed-loop global supply chain network design under uncertainty: The case of the medical device industry. *International Journal of Production Research*, 53(5): 1596-1624.

[7] Eskandarpour, M., **Nikbakhsh, E.**, Zegordi, S.H., (2014) Variable neighborhood search for the bi-objective post-sales network design problem: A fitness landscape analysis approach. *Computers & Operations Research*, 52(B): 300-314.

[8] **Nikbakhsh, E.**, Zegordi, S.H., (2014) Hub arc covering location problem under disruption (In Persian). *Journal of Industrial Management Perspective*, 13: 9-29.

[9] **Nikbakhsh, E.**, Zegordi, S.H., (2014) A memetic algorithm for designing a capacitated hub network under demand uncertainty and disruption (In Persian). *Journal of Industrial Engineering*, 48(1): 109-123.

[10] Eskandarpour, M., Zegordi, S.H., **Nikbakhsh, E.**, (2013) A parallel variable neighborhood search for the multi-objective sustainable post-sales network design problem. *International Journal of Production Economics*, 145(1): 117-131.

[11] Zanjirani Farahani, R., Hekmatfar, M., Boloori Arabani, A., **Nikbakhsh, E.**, (2013) Hub location problems: A review of models, classification, solution techniques, and applications. *Computers & Industrial Engineering*, 64(4): 1096-1109.

[12] Hasani, A.A., Zegordi, S.H., **Nikbakhsh, E.**, (2012) Robust closed-loop supply chain network design for perishable goods in agile manufacturing under uncertainty. *International Journal of Production Research*, 50(16): 4649-4669.

[13] **Nikbakhsh, E.**, Nahavandi, N., Zegordi, S.H., (2011) Goal programming approach to the bi-objective competitive flow-capturing facility location problem (In Persian). *International Journal of Industrial Engineering & Production Management*, 22(3): 294-302.

[14] **Nikbakhsh, E.**, Zegordi, S.H., (2010) A heuristic algorithm and a lower bound for the two-echelon location-routing problem with soft time windows constraints. *Scientia Iranica*, 17(1E): 36-47.

[15] Zegordi, S.H., **Nikbakhsh, E.**, (2009) A heuristic and a lower bound for the two-echelon location-routing problem (In Persian). *International Journal of Industrial Engineering & Production Management*, 20(1): 1-14.

REFEREED BOOK CHAPTERS

[16] **Nikbakhsh, E.**, Eskandarpour, M. Zegordi, S.H., (2013) Designing a robust post-sales reverse logistics network. In Ao, S.-I., Gelman, L. (Eds.), *Electrical Engineering and Intelligent Systems*, Volume 130, Berlin, Springer, 313-325.

[17] **Nikbakhsh, E.** (2012) Supply chain risk management. In Zanjirani Farahani, R., Rezapour, S., Kardar, L. (Eds.), *Supply Chain Sustainability and Raw Material Management: Concepts and Processes*, Hershey, PA, IGI Global, 176-204.

CONTRIBUTED
BOOK CHAPTERS

[18] **Nikbakhsh, E.**, Zanjirani Farahani, R., (2011) Humanitarian logistics planning in disaster relief operations. In Zanjirani Farahani, R., Rezapour, S., Kardar, L. (Eds.), *Logistics Operations and Management: Concepts and Models*, Waltham, MA, Elsevier Insights, 291-332.

[19] **Nikbakhsh, E.** (2009) Green supply chain management. In Zanjirani Farahani, R., Asgari, N., Davarzani, H. (Eds.), *Logistics and Supply Chain Management in International, National and Governmental Environment*, Berlin, Springer, 195-220.

CONFERENCE
PROCEEDINGS

[20] Rahimi, N., Zegordi, S.H., **Nikbakhsh, E.**, (2020) A vendor managed inventory control model for a pharmaceutical closed-loop supply chain. *16th Iranian International Industrial Engineering Conference*, Tehran, Jan. 22-23.

[21] Jamshidi, A., **Nikbakhsh, E.**, (2020) Maximizing the hub network profit considering static competition and service level. *16th Iranian International Industrial Engineering Conference*, Tehran, Jan. 22-23.

[22] Hemmati, H., Kazemzadeh, R.B., **Nikbakhsh, E.**, (2019) Application of fuzzy data envelopment analysis for evaluating the efficiency of suppliers under uncertainty. *11th Conference on Data Envelopment Analysis*, Shiraz, Aug. 28-29.

[23] Contreras, I., Cordeau, J.-F., Laporte, G., **Nikbakhsh, E.**, (2014) Robust uncapacitated hub location. *The 56th CORS Annual Conference*, Ottawa, May 26-28.

[24] Contreras, I., Cordeau, J.-F., Laporte, G., **Nikbakhsh, E.**, (2014) Robust uncapacitated hub location. *Optimization Days 2014*, Montréal, May 5-7.

[25] **Nikbakhsh, E.**, Zegordi, S.H., (2013) Competitive hub location-pricing problem. *Optimization Days 2013*, Montréal, May 6-8.

[26] **Nikbakhsh, E.**, Zegordi, S.H., (2012) A hybrid heuristic for the robust capacitated fixed-charge hub location problem under disruption and demand uncertainty. *ISOLDE XII*, Nagoya and Kyoto, July 19-24.

[27] **Nikbakhsh, E.**, Zegordi, S.H., (2011) Locating hub facilities under disruption risk. *The EURO Working Group on Locational Analysis XIX*, Nantes, Oct. 12-14.

[28] Zegordi, S.H., Eskandarpour, M., **Nikbakhsh, E.**, (2011) A novel bi-objective multi-product post-sales reverse logistics network design. *Proceedings of the World Congress on Engineering 2011*, London, July 6-8, 716-720.

[29] **Nikbakhsh, E.**, Nahavandi, N. (2010) Goal programming approach to the bi-objective competitive flow-capturing facility location problem (In Persian). *The 7th International Conference of Industrial Engineering*, Isfahan.

[30] Zegordi, S.H., **Nikbakhsh, E.**, Modarres, M., (2010) A cutting plane algorithm for solving single machine scheduling problem with uncertain sequence-dependent setup times. *Proceedings of the 36th MATADOR Conference*, Manchester, July 14-16, 119-122.

[31] **Nikbakhsh, E.**, Safaei, A.S., Kazemzadeh, R.B., Zegordi, S.H., (2010) Robust optimization approach to multi-period production-distribution planning under uncertainty (In Persian). *The 3rd International Conference of Iranian Operations Research Society*, Tehran, May 5-6.

[32] Safaei, A.S., **Nikbakhsh, E.**, Nakhai, I., (2009) Robust optimization approach to multi-period production planning in supply chains under uncertainty (In Persian). *The 1st International Logistics and Supply Chain Conference*, Tehran, Nov. 16-17.

[33] Malayeri, A., **Nikbakhsh, E.**, Shahin, A. (2006) Reviewing total quality management approaches in organization life cycles (In Persian). *The 7th International Conference of Quality Managers*, Tehran, July 17-18.

INVITED TALKS

Faculty of Industrial & Systems Engineering, **Tarbiat Modares University**, Tehran, Iran

- Applications of Stochastic Programming and Robust Optimization in Network Design. Organized by the Socio-Economic Systems Engineering Department, Dec. 24, 2018.

- Introduction to Industrial and Systems Engineering. Organized jointly by the Socio-Economic Systems Engineering and the System and Productivity Management Departments, Oct. 19 & Nov. 2, 2015.

- Introduction to Industrial and Systems Engineering. Organized jointly by the Socio-Economic Systems Engineering and the System and Productivity Management Departments, Oct. 30, 2013.

Interuniversity Research Centre on Enterprise Networks, Logistics and Transportation (CIRRELT), Montréal, Canada

- Green Supply Chain Network Design for Post-Sales Companies. Organized jointly by Canada Research Chair in Logistics and Transportation and Canada Research Chair in Distribution Management, Mar. 13, 2013.

TEACHING

Faculty of Industrial & Systems Engineering, **Tarbiat Modares University**, Tehran, Iran

Stochastic Programming	**Fall 2020**
Supply Chain Network Design	**Fall 2020**
Advanced Computing Workshop	**Spring 2020**
Analysis and Design of Logistics Systems	**Spring 2020**
Financial Time Series	**Spring 2020**
Forecasting and Time Series	**Fall 2019**
Project Management and Planning	**Fall 2017**
Linear Algebra	**Fall 2017**
Dynamic Programming	**Spring 2017**
Fundamentals of Industrial & Systems Engineering	**Fall 2016**
Operations Research	**Spring 2011**

Dep. of Industrial Management, **Tarbiat Modares University**, Tehran, Iran

Queueing Systems	**Fall 2014**

Faculty of Health, Safety, and Environment, **Shahid Beheshti University of Medical Sciences**, Tehran, Iran

Operations Research I	**Fall 2010**
Manufacturing Processes II	**Fall 2010**

PROFESSIONAL
EXPERIENCE

Tarbiat Modares University, Tehran, Iran

Developing the strategic change plan, Strategic Management Consultant   **Sep. 2015-July 2016**

Iranian Ministry of Cooperatives, Labor, and Social Welfare, Tehran, Iran

Auditing and Analysis of Processes, BPR Consultant   **Nov. 2015-Jan. 2016**

Identification and Documentation of Processes, BPR Consultant   **Dec. 2014-Aug. 2015**

Mobile Telecommunication Company of Iran, Tehran, Iran

Contractor selection and monitoring the implementation of the total organizational excellence (TOE) programmes, Project Management Consultant   **Jan. 2014-Jan. 2015**

Developing the total organizational excellence (TOE) roadmap, BPR Consultant   **Jan. 2014-Sep. 2014**

Interuniversity Research Centre on Enterprise Networks, Logistics and Transportation (CIRRELT), Montréal, Canada

Visiting Research Intern working on "Robust Uncapacitated Hub Location Problems" under the supervision of Prof. Ivan Contreras (Concordia University) and Prof. Jean-François Cordeau (HEC Montréal)   **Jan.-Sep. 2013**

Iranian National Tax Administration, Tehran, Iran

Developing and Implementing the change management plan for implementing the integrated tax system, Risk Management Consultant   **Aug. 2011-Aug. 2012**

Tehran EMS Center, Tehran, Iran

Locating fixed and mobile ambulance stations in the Tehran district six, Location Analyst   **Oct. 2010-Oct. 2011**

Institute of Information Technology, **Tarbiat Modares University**, Tehran, Iran

Analyzing the role of information technology in supply chain risk and performance management, Principal Investigator   **Sep. 2010-Mar. 2011**

Research and Planning Bureau of Tejarat Bank, Tehran, Iran

Analyzing and benchmarking of Branch Locations, Location Analyst   **Feb. 2010-Mar. 2011**

Tehran Public Bus Company, Tehran, Iran

Designing performance measurement and information systems for operating the transportation fleet, Performance Management Analyst **Dec. 2008-Feb. 2010**

Mobarakeh Steel Company, Isfahan, Iran

Value engineering studies for the comprehensive and macro plan of the material stocking and handling operations, Layout Analyst   **July-Aug. 2009**

Institute for Trade Studies and Research, Tehran, Iran

Analyzing and benchmarking of international disaster logistics operations, Supply Chain Analyst   **Sep.-Nov. 2007**

Amirkabir University of Technology, Tehran, Iran

Documentation, analysis, and improvement of existing governmental procurement practices and determining purchasing best practices for different product groups, Supply Chain Analyst   **Nov. 2006-Sep. 2007**

Saipa Piston Co., Golpayegan, Iran

Designing the foundry layout, Layout Analyst   **Nov. 2003-Jan. 2004**

<table>
<tr><td>Honors and
Awards</td><td>

Tarbiat Modares University, Tehran, Iran

- Ranked 3rd among more than 480 applicants for the Ph.D. program in Industrial Engineering (98th percentile), July 2008.

- Ranked 1st among all students entering in 2005 for M.Sc. in Industrial Engineering Socio-Economic Systems Engineering, Sep. 2008.

- Ranked 1st among all students of the M.Sc. program in Industrial Engineering Socio-Economic Systems Engineering graduating in the 2007-2008 academic year, Sep. 2008.

Iranian Ministry of Science, Research, and Technology, Tehran, Iran

- Received a 12500$ visiting researcher scholarship, Jan. 2013-Sep. 2013.

- Received a 5000$ research scholarship, Jan. 2010-Jan. 2012.

- Ranked 73rd among more than 5000 applicants for nation-wide entrance exam of M.Sc. in Industrial Engineering Socio-Economic Systems Engineering (98th percentile), 2005.

</td></tr>
</table>

GRADUATE-LEVEL **Tarbiat Modares University**, Tehran, Iran
COURSEWORK
- Network Theory (Ranked first in the class)
- Nonlinear Programming
- Multi-Criteria Decision Making (Ranked first in the class)
- Logistics Engineering
- Scheduling Theory
- Research Methodology (Ranked first in the class)
- Integer Programming (Audited)
- Combinatorial Optimization (Audited)
- Mathematical Programming
- Econometrics (Ranked first in the class)
- Computer Simulation (Ranked first in the class)
- Artificial Intelligence (Ranked first in the class)
- Facilities Location and Layout

Golpayegan University of Technology
- Operation Research II
- Queueing Theory and Stochastic Processes
- Statistical Fundamentals of Simulation
- Manufacturing Automation
- Management Information Systems (Ranked first in the class)

Sharif University of Technology, Tehran, Iran
- Financial Engineering

Concordia University, Montréal, Canada
- Discrete Optimization (Audited)

ACADEMIC   **Referee**
SERVICE
- *European Journal of Operational Research*
- *Computers & Industrial Engineering*
- *International Journal of Production Research*

- *European Journal of Industrial Engineering*
- *IMA Journal of Management Mathematics*

Member of the Organizing Committee
IIEC 2015: The 11th International Industrial Engineering Conference, Tehran, Iran, Jan. 7-8, 2015.   **July 2014-Jan. 2015**

ACADEMIC   Iran Society of Engineering Education (ISEE)
MEMBERSHIPS   EURO Working Group on Locational Analysis (EWGLA)
               EURO Working Group on Vehicle Routing (VeRoLog)
               EURO Metaheuristics Community (EU/ME)

SKILLS   Programming Languages:
- C++
- C#
- Python

Optimization Packages:
- CPLEX
- GAMS
- LINGO

Statistical & Simulation Packages:
- Minitab
- SPSS
- R

Operating Systems & General Software:
- MS Windows
- Linux (Basic)
- MS Office (Word, Excel, PowerPoint, Project, Visio)
- LaTeX

LANGUAGES   Persian (Native)
               English (Working-Level Proficiency)
               French (Elementary)

REFERENCE   **Prof. Seyed Hessameddin Zegordi**, Faculty of Industrial & Systems Engineering, Tarbiat Modares University, E-mail: zegordi@modares.ac.ir; Tel.: +98 (21) 8288 3394.

Prof. Reza Zanjirani Farahani, Kingston Business School, Kingston University, E-mail: r.zanjiranifarahani@kingston.ac.uk; Tel.: +44 (0) 20 8417 9000 (Ext. 65098).

Prof. Amir Albadvi, Faculty of Industrial & Systems Engineering, Tarbiat Modares University, E-mail: albadvi@modares.ac.ir; Tel.: +98 (21) 8288 3395.

Prof. Mohammad Modarres, Dep. of Industrial Engineering , Sharif University of Technology, E-mail: modarres@sharif.edu; Tel.: +98 (21) 6616 5719.

Prof. Isa Nakhai Kamalabadi, Dep. of Industrial Engineering, Faculty of Engineering, University of Kurdistan, E-mail: i.nakhai@uok.ac.ir; Tel.: +98 (871) 666 0073.

Last Update: Sep. 5, 2020