

Curriculum Vitae

Hamid Farvaresh, Ph.D.

Associate Professor

Department of Industrial Engineering

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Educational Background

- **Ph.D.**, Industrial Engineering, Tarbiat Modares University, Tehran, Iran, May 2011.

Supervisor: Dr. Mohammad Mehdi Sepehri (Professor), Faculty of Industrial and Systems Engineering, Tarbiat Modares University, Tehran, Iran.

Thesis Title: *Developing Solution Methods for the Bi-level Transportation Network Design Problem.*

- **M.Sc.**, Industrial Engineering, Tarbiat Modares University, Tehran, Iran, September 2005.

Supervisor: Dr. Mohammad Mehdi Sepehri (Professor), Faculty of Industrial and Systems Engineering, Tarbiat Modares University, Tehran, Iran.

Thesis Title: *Providing a Data Mining Model to Identify Insolvent Customers: Iranian telecommunication company case study.*

- **B.S.**, Industrial Engineering, Shahid Bahonar University of Kerman, Kerman, Iran, September 2002.

Work

- Associate Professor in Industrial Engineering, University of Kurdistan,
- Assistant Professor in Industrial Engineering, University of Kurdistan,

Administrative and Executive Positions

- Director of Planning, Budget, Organizational Change and Productivity, University of Kurdistan, 2020-2023.
- Head of Studies and Curriculum Planning, University of Kurdistan, 2017-2020.
- Director of the Executive Group on Economics, Industry, and Tourism of the National Network of Society and University, 2018-2019.
- Director of the Simulation and Optimization Laboratory, Faculty of Engineering, University of Kurdistan, 2016.
- Advisor of “Twenty-fifth Student Scientific Olympiad in Industrial Engineering”, Department of Industrial Engineering, University of Kurdistan, 2019.
- Advisor of Industrial Engineering Scientific Association, Faculty of Engineering, University of Kurdistan, 2012-2013, 2015-2016, 2019-2020.

Awards and Honors

- National outstanding professor award for the best advisor of student scientific associations. Iran’s Ministry of Science, Research and Technology, 2014.

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- The outstanding professor award in University of Kurdistan for best teaching performance, 2014, 2015, and 2017.
 - Certificate of appreciation from the president of the University of Kurdistan for mechanization and automation of educational processes, 2017.
 - Certificate of appreciation from the president of the University of Kurdistan for being the top provincial team in monitoring, evaluation, and quality assurance in the country, 2017.
 - The outstanding professor award in University of Kurdistan for employing educational technologies in teaching, 2018.
 - The outstanding professor award for the best advisor of student scientific associations. University of Kurdistan, 2013, 2014.
 - **1st** rank among 300 applicants in the Tarbiat Modares University's Ph.D. Entrance Examination in Industrial Engineering, 2005, Tehran, Iran.
 - Ministry of Road and Transportation award for the best project of the year, 2005, Tehran, Iran. (*Manager of project team*).
 - **First** class honor of Industrial Engineering students of Shahid Bahonar University of Kerman, Kerman, Iran (Class of 2002).

Teaching

- Graduate Level:
 - University of Kurdistan-Industrial Engineering:
 - Data Mining (2016-2024)
 - Multivariate Data Analysis (2023-2024)
 - Integer Programming, (2011-2024)
 - Statistical Methods, (2011-2016)
 - Statistical Experimental Design (2017-2024)
 - Advanced Computing Workshop (2017-2019)
 - Social Network Analysis, (2015)
 - Tarbiat Modares University:
 - Econometrics and Forecasting, (2007-2011)
 - Quantitative Methods in Marketing Research (2010)
- Undergraduate Level:
 - University of Kurdistan-Industrial Engineering:
 - Operations Research I, (2011-2024)
 - Operations Research II, (2011-2024)
 - Linear Algebra, (2011-2021)
 - Engineering Statistics, (2011-2021)
 - Computer Applications in Industrial Engineering, (2011-2014)

Research Interests

- Machine Learning and Business Intelligence
- Transportation Planning and Economics
- Statistical Analysis (Statistical Learning, Regression Analysis, Experimental Design, Time Series and Forecasting, Multivariate Analysis)
- Optimization and Mathematical Programming (with focus on Integer Programming and Bi-level Programming)

Books:

- “Introduction to Ad-hoc logistics”, (Co-authored with A. Abbasi Raei and I. Nakhai Kamalabadi), University of Kurdistan Press, 2019. In Persian.
- “Application of data mining in marketing and customer relationship management”, (Co-authored with M. M. Sepehri, B. Teymourpour), Ariana Press, 2006. In Persian.

Publications: (Total Citations: 497, h-index: 10)

Google Scholar Link:

https://scholar.google.com/citations?hl=en&user=L4sVwP8AAAAJ&view_op=list_works&alert_preview_top_rm=2&sortby=pubdate

Published Peer Reviewed Journal Papers:

- R. Soltani, M. M. Seyyed Esfehni, M. Ashrafi, **H. Farvareh**, “Competitive pricing of complementary telecommunication services with subscriber churn in a duopoly”, *Expert Systems with Applications*. (2024), 237, 121447
<https://doi.org/10.1016/j.eswa.2023.121447>
- Shiri, M., Ahmadizar, F., Thiruvady, D., & **Farvareh, H.**, “A sustainable and efficient home health care network design model under uncertainty”. *Expert Systems with Applications*, (2023), 211, 118185.
<https://doi.org/10.1016/j.eswa.2022.118185>
- M. Amiri, **H. Farvareh**, “Carrier Collaboration with the Simultaneous Presence of Transferable and Nontransferable Utilities”, *European Journal of Operational Research*, (2023), 304 (2), 596-617
<https://doi.org/10.1016/j.ejor.2022.04.033>
- S.M. Aghazadeh, **H. Farvareh**, “Collaborative advertising in a two-level supply chain with limited production capacity and advertising budget with a two-level planning approach”, *Journal of Industrial Engineering Research in Production Systems*, 2022, 10 (21), 93-105
<https://doi.org/10.22084/ier.2023.27216.2109>
- M. Hosseinmardi, **H. Farvareh**, I. Nakhai Kamalabadi, “A New Formulation and Algorithm for Maximum Leaf Spanning Tree Problem with an Application in the Forest Fire Detection”, *Engineering Optimization*, (2022), 1226-1242
<https://doi.org/10.1080/0305215X.2022.2067151>
- Manteghi, Y., Arkat, J., Mahmoodi, A., **Farvareh, H.**, “A Multi-Period Bi-Level Model for A Competitive Food Supply Chain with Sustainability Considerations”, *Journal of Cleaner Production*, Vol. 325, (2021).
<https://doi.org/10.1016/j.jclepro.2021.129260>
- Manteghi, Y., Arkat, J., Mahmoodi, A., & **Farvareh, H.** “Competition and cooperation in the sustainable food supply chain with a focus on social issues”, *Journal of Cleaner Production*, Vol. 285, (2021), 124872.
<https://doi.org/10.1016/j.jclepro.2020.124872>

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- **Farvaresh, H.,** & Shahmansouri, S. “A coalition structure algorithm for large-scale collaborative pickup and delivery problem”, *Computers & Industrial Engineering*, Vol. 149, (2020), 106737.
<https://doi.org/10.1016/j.cie.2020.106737>
 - **Farvaresh, H.,** Jafari, A., “Modeling and Analysis of Collaborative Multi-Modal Transportation Between Rail and Road Operators based on Cooperative Game Theory”, *Sharif Journal of Industrial Engineering & Management*, Vol. 34.1(2.1), (2019), 89-100.
<https://doi.org/10.24200/j65.2018.20056>
 - Maleki, S., Sawhney, R., **Farvaresh, H.,** Sepehri, M. M., “Energy efficient hybrid wired-cum-wireless sensor network design”, *Journal of Cleaner Production*, Vol. 85 (2014), 408-418.
<http://dx.doi.org/110.1016/j.jclepro.2014.04.038>
 - Khalil Zadeh, N., Sepehri, M. M., **Farvaresh, H.,** “Intelligent Sales Prediction for Pharmaceutical Distribution Companies: A Data Mining Based Approach”, *Mathematical Problems in Engineering*, Vol. (2014).
<http://dx.doi.org/10.1155/2014/420310>
 - **Farvaresh, H.** and Sepehri, M. M., “A Branch and Bound Algorithm for Bi-level Discrete Network Design Problem”, *Network and Spatial Economics*, Vol. 13 (2013), 67-106.
<http://dx.doi.org/10.1007/s11067-012-9173-3>
 - Maleki, S., Sepehri, M. M., **Farvaresh, H.,** Nayeibi, A., Sawhney, R., “Multi-layer Hybrid Wired-cum-Wireless Sensor Network Design”, *International Journal of Communication Networks and Distributed Systems (IJCNDs)*, special issue on "Optimization Issues in Energy Efficient Distributed Systems", Vol. 9 (2012) 286-310.
<https://dx.doi.org/10.1504/IJCNDs.2012.048875>
 - **Farvaresh, H.** and Sepehri, M. M., “A single-level mixed integer linear formulation for a bi-level discrete network design problem”, *Transportation Research Part E*. Vol. 47 (2011), pp. 623-640.
<http://dx.doi.org/10.1016/j.tre.2011.02.001>
 - **Farvaresh, H.** and Sepehri, M. M., “An Efficient Data Mining Approach for Detecting Subscription Fraud in Telecommunication”, *Engineering Applications of Artificial Intelligence* 24 (2011) 182–194
<http://dx.doi.org/10.1016/j.engappai.2010.05.009>
 - Hamzehei, A., Fathian, M., Gholamian, M. R., **Farvaresh, H.,** “A new methodology to study customer electrocardiogram using RFM analysis and clustering”, *Management Science Letters*, Vol. 1 (2011), pp. 139-148.
<http://dx.doi.org/10.5267/j.msl.2010.03.009>

Peer reviewed Conferences

- **Farvaresh, H.,** Ghadimi, S., “Departure timetabling of inter-city buses in a competitive environment”, 11th International Industrial Engineering Conference, Tehran, Iran, 2015.
- **Farvaresh, H.,** Smaili, A., “A bi-level Model for Rail Freight Transportation Based on Revenue Management Concepts”, 11th International Industrial Engineering Conference, Tehran, Iran, 2015.
- **Farvaresh, H.,** Soltani, R., “Competitive Facility Location-Allocation Problem and Pricing; A Bi-level Programming Approach”, 11th International Industrial Engineering Conference, Tehran, Iran, 2015.
- **Farvaresh, H.,** Rahimi, M., “Cooperative Load Planning and Service Network Design for Less-than-Truckload Carriers”, 11th International Industrial Engineering Conference, Tehran, Iran, 2015.
- **Farvaresh, H.,** Rahimi, M., “Load Planning and Service Network Design for Less-than-Truckload Carriers”, 7th International Conference on Operations Research, Semnan, Iran, 2014.

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- **Farvaresh, H.**, Azizi, S., “A Bi-Level Model for Determining Government’s Incentive Mechanism to Affect Private Sector’s Production Policies”, 7th International Conference on Operations Research, Semnan, Iran, 2014.
 - **Farvaresh, H.**, Soltani, R., “A Bi-Level Programming Model for New Product Line Selection and Pricing Problem”, 6th International Conference on Operations Research, Tehran, Iran, May 2013.
 - **Farvaresh, H.**, Smaili, A., “A competitive model for freight transportation in rail sector based on revenue management concepts and multi-level programming”, 6th International Conference on Operations Research, Tehran, Iran, May 2013.
 - Bagheri, M., **Farvaresh, H.**, “A multi-period model for empty wagon assignment in multi-class freight transport in rail network”, 6th International Conference on Operations Research, Tehran, Iran, May 2013.
 - Ahmadizar, F., **Farvaresh, H.**, Farhadi, S., “A Mathematical Model for Batch Delivery Single-Machine Scheduling Problem”, 5th International Conference on Operations Research, Tabriz, Iran, 2012.
 - Arkat, J., Jafari, R., **Farvaresh, H.**, “A Model and solution algorithm for locating congested facilities”, 5th Conference on Operations Research, Tabriz, Iran, 2012.
 - Hamzehei, A., **Farvaresh, H.**, Fathian, M., “Customer segmentation and analysis based on behavioral trends”, IEEE International E-Commerce Conference, Mumbai, India, 2010.
 - Sepehri, M. M., Maleki, S., **Farvaresh, H.**, “Multi-layer hybrid Wired-cum-Wireless Sensor Network Design”, First International Conference on Operations Research, Iran, 2009.
 - Maihami, R., **Farvaresh, H.**, Nakhaei, I., “Global warming cost estimation of fuel consumption in road transportation sector of Iran and solutions to reducing these costs” 2nd national conference of fuel, energy and environment, Kermanshah, Iran, May 2009.
 - Sepehri, M., **Farvaresh, H.**, Mashaykhi, S., “Website hyperlink structure optimization by network theory”, 3rd International Conference of Marketing, Tehran, Iran, 2009.
 - Saghaei, E., Kazemzadeh, R., **Farvaresh, H.**, “A Model for Successful Presence of Iranian SMEs in International Markets” 3rd International Marketing Management Conference, Tehran, Iran, 2008.
 - Sepehri, M., Zare, M., **Farvaresh, H.**, “Formulation and solving the fixed-cost clustered multi-commodity transportation problem”, 1st International Conference on Operations Research, Kish Island, Iran, 2007.
 - **Farvaresh, H.**, “Electronic procurement of process and its implications to global logistics” 1st National Conference on Logistics and Supply Chain, Tehran, February 2005.
 - Sepehri, M., **Farvaresh, H.**, “Comparing the linear methods with neural network technique for forecasting the stock price of Tehran stock market”, 2nd International Conference on Information Technology and Knowledge, Tehran, Iran, May 2005.

Workshops

- “Efficient and effective use of cloud-based services in academic affairs”, University of Kurdistan, 2016.
- “Technical and economic feasibility studies of road and rail projects”, National Conference on Transportation Infrastructures, Transportation Research Institute, February 13, 2013.
- “Data mining applications in marketing and customer relationship management” 2nd International Conference of Marketing, 2006.

Grants and Funded Projects:

- Director, “Performance evaluation of faculties and departments of University of Kurdistan”, (Fund: USD 7000)
 - Director, “A Study on Iran’s duplicate freight road transport and solutions to reduce it”, Transportation Research Institute, Ministry of Transportation, 2008-2011. (Fund: USD 53000)
 - Director, “Economical evaluation of renovation of traditional marine transport’s fleet of Iran”, Transportation Research Institute, Ministry of Transportation, 2007-2009. (Fund: USD 38500)
 - Manager, Designer and developer of software for project “Compilation a manual for technical and economical evaluation of road and rail projects”, Transportation Research Institute, Ministry of Transportation, 2008-2009. (Fund: USD 46000)
 - Manager and principal investigator, “Prioritization model for rural road improvement projects with emphasis on regional aspects”, Transportation Research Institute, Ministry of Transportation, 2007-2009. (Fund: USD 36500)
 - Co-investigator, “Prioritization model for construction projects of main roads of Iran”, Transportation Research Institute, Ministry of Transportation, 2007-2009. (Fund: USD 36500)
 - Manager and co-investigator, “Economic evaluation of rail fleet renovation”, Transportation Research Institute, Ministry of Transportation, 2006-2007. (Fund: USD 49500)
 - Manager and co-investigator, “Economic evaluation of air fleet renovation”, Transportation Research Institute, Ministry of Transportation, 2006-2007. (Fund: USD 38500)
 - Manager and investigator, “Survey, study, and comparison of road pricing models for Iran’s roads”, Transportation Research Institute, Ministry of Transportation, 2007. (Fund: USD 11000)
 - Manager and principal investigator, “Economic evaluation of road and rail fleet renovation aiming at reducing fuel consumption”, Transportation Research Institute, Ministry of Transportation, 2003-2005. (Fund: USD 79000) Selected as the best annual project of Ministry of Roads and Transportation (2005).
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Memberships:

- Member of Iranian Operations Research Society, 2011-Present.
- Member of Iran Institute of Industrial Engineering, 2010-Present.
- Official member of University Council, 2020-Present.
- Official member of Education Council of University of Kurdistan, 2017-2020.
- Official member of Strategic Council for Budgeting, University of Kurdistan, 2021-Present.
- Official member of the Executive group for “Monitoring, Evaluation and Quality Assurance of Universities of Kurdistan Province”, 2019-2020.
- Official member of the Executive group for “Organizational Change and Productivity of University of Kurdistan”, 2019.
- Official member of the Council of Technology Incubator Center, University of Kurdistan, 2020-Present.
- Official member of the Council of Information Technology, University of Kurdistan”, 2013-2015, 2020-Present.
- Official member of the Entrepreneurship Committee of University of Kurdistan”, 2017-2018.
- Official member of Executive group for “Internal Evaluation of University of Kurdistan”, 2016-2017.
- Official member of Executive group for Monitoring, Evaluation and Quality Assurance of Research and Technology Affairs of University of Kurdistan, 2017-2019.
- Official member of “Supply Chain Group Research Council”, 2015.
- Official member of “Supervision Committee of Scientific Associations of Students”, 2015.