

Morteza Jafarzadeh

Curriculum Vitae

Faculty of Mathematics and Computer Sciences
Hakim Sabzevari University, Sabzevar, Iran

☎ (98)-051-44013695

✉ m.jafarzadeh@hsu.ac.ir



"The only way to do great work is to love what you do." - Steve Jobs

Personal Information

Date of birth January 30, 1982

Place of birth Sabzevar, Iran

Education

2011–2017 **Ph.D.**, Ferdowsi University of Mashhad, Iran, Department of Mathematics.

- Title of Thesis: New approaches in the selection of the optimal portfolio of project
- Supervisor: Prof. Hamed Reza Tareghian

2004–2006 **M.Sc.**, Hakim Sabzevari University, Iran, Department of Applied Mathematic.

- Title of Thesis: Solving the parametric mathematical programming and shortest path problem using neural network models
- Supervisor: Prof. Sohrab Effati

2000–2004 **B.Sc.**, Hakim Sabzevari University, Iran, Department of Applied Mathematic.

Research Interests

- Operation Research and Optimization
- Optimal Control
- Neural Networks
- Project Management
- Meta Heuristic Algorithms
- Project Portfolio
- Graph Theory
- Computational Geometry
- Artificial Intelligence
- Image Processing
- Deep Learning

Teaching Experiences

Undergraduate Courses

- 2005–Present
- Computer Programming Languages
 - Data Structure
 - Graph Theory
 - Discrete Mathematics
 - Calculus
 - Mathematics Softwares

Graduate Courses

- 2018–Present
- Advanced Algorithm Design
 - Combinatorial Optimization
 - Project Planning and Control

Academic Positions

- 2007–2017 **Instructor**, Hakim Sabzevari University, Sabzevar, Iran.
2017–Present **Assistant Professor**, Hakim Sabzevari University, Sabzevar, Iran.

Honors

- 2004 **First rank B.Sc. student**, Hakim Sabzevari University, Iran.
2006 **Second rank M.Sc. student**, Hakim Sabzevari University, Iran.
2017 **Second rank Ph.D. student**, Ferdowsi University of Mashhad, Iran.

Programming and Computer Skills

Programming languages	Pascal, C++, C#, Python, HTML, Java script
Optimization programming language	Lingo, GAMS, CPLEX
Mathematical programming	MATLAB, Maple
Professional IDE	C++ Builder, Delphi, Microsoft visual studio
Microsoft Office	Word, Excel, Powerpoint, Visio

Journal Papers

1. Zaferanieh, Mehdi, Abareshi, Maryam, and **Jafarzadeh, Morteza**. A bi-level p-facility network design problem in the presence of congestion. *Computers & Industrial Engineering*, 176:109010, 2023.
2. **Jafarzadeh, M.**, Tareghian, H. R., Rahbarnia, F., and Ghanbari, R. Optimal selection of project portfolios using reinvestment strategy within a flexible time horizon. *European Journal of Operational Research*, 243:658664, 2015.
3. Etemadi, E., Zamani, J., and **Jafarzadeh, M.** Physical constitutive equations for plastic deformation of FCC metals subjected to high strain rate loading. *Journal of Materials Design and Applications*, 2015. DOI: 10.1177/1464420715618423
4. Etemadi, E., Zamani, J., and **Jafarzadeh, M.** Theoretical model to investigate response of aluminum 6061 alloy under high strain rate loading. *Modares Mechanical Engineering*, 14:153162, 2015
5. Entezari, A. R., Haddadnia, J., **Jafarzadeh, M.**, and Kurvandi, E. A MLP neural network in order to predict ice-weathering in keranshah province. *Arid Regions Geographic Studies*, 1(3):5971, 2011.
6. Effati, S. and **Jafarzadeh, M.** A new nonlinear neural network for solving a class of constrained parametric optimization problems. *Applied Mathematics and Computation*, 186(1):814819, 2007.
7. Effati, S. and **Jafarzadeh, M.** Nonlinear neural networks for solving the shortest path problem. *Applied Mathematics and Computation*, 189(1):567574, 2007

Conference Papers

1. Shahbakhsh razavi, A. H. and **Jafarzadeh, M.** Analytical hierarchy process in cloud service selection. in 11th Seminar on Linear Algebra and its Applications, Hakim Sabzevari University, February 2022.
2. Shahbakhsh razavi, A. H., Zaferanieh, M., and **Jafarzadeh, M.** A multi-criteria solution approach to the cloud computing selection problem. in 4th National Seminar on Control and Optimization, Mazandaran University of Science and Technology, February 2022.
3. **Jafarzadeh, M.** A genetic algorithm for solving project portfolio selection problem under reinvestment strategy. in 50th Annual Iranian Mathematics Conference, Shiraz University, August 2019.
4. Korozhdehi, S. and **Jafarzadeh, M.** Optimal selection of project portfolios from the viewpoint of sharing resources. in Third National Seminar on Control and Optimization, Hakim Sabzevari University, November 2019.
5. **Jafarzadeh, M.**, Tareghian, H. R., Rahbarnia, F., and Ghanbari, R. A branch and bound heuristic algorithm to solve project portfolio selection problem under reinvestment strategy. in 2nd International Conference on Industrial and Systems Engineering, Ferdowsi University of Mashhad, 2016.
6. **Jafarzadeh, M.** and Shahlaei, F. Algorithms for graph vertex coloring and finding the chromatic number. in 40-th Annual Iranian Mathematics Conference, Sharif University of Technology, August 2009.

Industrial applied projects

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| Co-Worker | Design and Implementation of Intelligent Automation System including Hardware and Software for Electric Power Distribution Network on cities in Iran including: Sabzevar, Neyshabour and Birjand |
| Co-Worker | Designing of SL-CAD software to draw and optimize constrained geometric parameters in stator lamination part for different electro motors, Sabzevar, Iran |

Students

Supervisor of M.Sc. students:

- 2018–2020 Eisa Rasaeizadeh, Title of Thesis: An approach based on multi-objective optimization for university course timetabling problem
- 2018–2020 Samira Ramezani Moghaddam, Title of Thesis: Review on resource-constrained project scheduling problem: models, algorithms and developments
- 2018–2021 Samira Korozhdehi, Title of Thesis: Optimizing project selection from the perspective of complex resource constraint
- 2019–2022 Atefeh Shiri, Title of Thesis: Tumor detection using optimization methods
- 2020–2022 Sadegh Gholamzadeh, Title of Thesis: Passenger flow prediction using deep learning
- 2020–2022 Mahmood Sadra, Title of Thesis: Bi-level traffic assignment problem using data mining
- 2019–2023 Sahar Shams Abadi, Title of Thesis: A general space-time model for the facility location problem

Advisor of M.Sc. students:

- 2009–2011 Amir Feizi, Title of Thesis: The multi-facility location allocation problems in a plane with polyhedral barriers
- 2015–2017 Mohammad Cheraghsetan, Title of Thesis: Numerical solution of nonlinear Volterra and fractional integro- differential equations based on the legendre wavelets
- 2019–2021 Minoo Dolatabadi, Title of Thesis: Single-facility location problems with barriers
- 2019–2021 Zahra Rostami, Title of Thesis: Fake news detection on social media
- 2021–2022 Amirhossein Shahbakhsh Razavi, Title of Thesis: Choose cloud services using multicriteria optimization methods
- 2021–2023 Elahe Seddighi, Title of Thesis: Solving fractional optimal control problems of nonlinear with inequality constraints by modified hat functions