# Maryam Radman

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Department of Industrial Engineering
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## Research Interests

- Operations research
- Decomposition algorithms
- Large-scale optimization

## Courses

- Decomposition Methods in Optimization, Graduate Course.
- Control Project, Undergraduate Course.

## Education

**Sharif University of Technology, Tehran, Iran** 2015-2021

**PhD**, Industrial Engineering

**PhD thesis**: Decomposition approaches to set covering and set packing problems through exploiting special structures (Case study: crew pairing problem)

**Advisor:** Dr. Koroush Eshghi

**GPA:** 19.5 out of 20, **1st rank**

**Defense Score**: Excellent

**Sharif University of Technology, Tehran, Iran** 2013-2015

**Master of Science**, Industrial Engineering

**MSc thesis**: Designing a multi-service healthcare network based on the impact of patients' flow among medical services

**Advisor:** Dr. Koroush Eshghi

**GPA:** 19.13 out of 20, **1st rank**

**Sharif University of Technology, Tehran, Iran** 2009-2013

**Bachelor of Science**, Industrial Engineering

**Final thesis**: Passenger port location selection using the fuzzy VIKOR and fuzzy TOPSIS methods and an application.

**Advisor:** Dr. Mohamad Reza Akbari

**GPA:** 18.51 out of 20, **1st rank**

## Publications

- **Radman M**., Eshghi K. (2021). Solving airline crew pairing problems through constraint partitioning. *European Journal of Industrial Engineering* (Accepted and under publication).

- Asef-vaziri, A., Kazemi, M. & **Radman, M**. (2021). The Facility Layout Instances of the Generalized Traveling Salesman Problem. *International Journal of Production Research*, 1-18. https://doi.org/10.1080/00207543.2021.1970847.

- **Radman M.,** Eshghi K. (2021). A novel decomposition approach to set covering problems by exploiting special structures. *International Journal of Mathematics in Operational Research.* 10.1504/IJMOR.2021.10037688.

- **Radman M**., Eshghi K. (2019). A Nested Decomposition Approach for a Large Scale Set Covering Problem: A Model with a Variety of Applications in Industry 4.0. Springer *Optimization and Its Applications* 152: 165-177. Springer, Cham. https://doi.org/10.1007/978-3-030-28565-4_17.

- **Radman, M**., & Eshghi, K. (2019). A framework to exploit the structure of and solve set packing problems with a semi-block-angular structure. Computers & Industrial Engineering, 106036. https://doi.org/10.1016/j.cie.2019.106036.

- **Radman, M**., & Eshghi, K. (2018). Designing a multi-service healthcare network based on the impact of patients' flow among medical services. OR Spectrum, 40(3), 637-678. https://doi.org/10.1007/s00291-018-0519-1.

- **Radman, M**., & Eshghi, K. (2016). A multi-service healthcare network design with patients' choice to exchange between services. International Journal of Industrial Engineering & Production Research, 28(2), 271-287 (In Persian).

- **Radman, M**., & Eshghi, K. (2016, November). A multi-service Healthcare Network Design with Patients' Choice to Exchange between Services. In 2016 2nd International Conference on Artificial Intelligence and Industrial Engineering (AIIE 2016). Atlantis Press.

- **Radman, M**., Taherkhani, A., Akbari, M (2015, January). Passenger port location selection using the fuzzy VIKOR and fuzzy TOPSIS methods and an application. In 11th International Industrial Engineering Conference (IIEC 2015), Tehran, Iran (In Persian).

## Honors & Awards

- Entering PhD Program as a Brilliant Talent. (Without Entrance Exam) 2015
  Sharif University of Technology, Tehran, Iran.

- Outstanding Master of Science Graduate Award. 2015
  Sharif University of Technology, Tehran, Iran.
  First place among all Industrial Engineering M.Sc. graduates.

- Entering M.Sc. Program as a Brilliant Talent. (Without Entrance Exam) 2013
  Sharif University of Technology, Tehran, Iran.

- Outstanding Bachelors of Science Graduate Award. 2013
  Sharif University of Technology, Tehran, Iran.
  First place among all Industrial Engineering B.Sc. graduates.
- Selected for the National Elites Foundation Award for M.Sc. Students. 2014
- Selected for the National Elites Foundation Award for PhD Students. 2015-2018
- Selected for the Ahmadi Roshan project, National Elites Foundation. 2016
- Selected for the Dr. Chamran postdoctoral award, National Elites Foundation. 2021
- Selected for the Dr. Shahriari award related to the admission as a faculty member in universities, National Elites Foundation. 2022

## Work Experiences

- Assistant Professor, Department of Industrial Engineering, Sharif University of Technology, Apr 2022-Present.
- Instructor, Department of Industrial Engineering, Sharif University of Technology, Apr 2020-Jan 2022.
- Analyst, Faraz Company, 2020.
- Senior Project Coordinator, Ahmadi Roshan project, National Elite Foundation, 2017-2018.