Mir Ehsan Hesam Sadati, Ph.D.

Part-time Facuty Memebr & Researcher
Industrial Engineering Department
Sabanci University

Email:
msadati@sabanciuniv.edu

Personal Homepage:
http://myweb.sabanciuniv.edu/msadati/

Google Scholar Profile

EDUCATIONAL STATUS

[2014–2018] **PhD** in Industrial Engineering and Operations Management, Koç University, Istanbul, Turkey.

Thesis: *A Trilevel r-Interdiction Multi-Depot Vehicle Routing Problem with Depot Protection and Customer Selection*

Supervisor: Assoc. Prof. Deniz Aksen

[2012–2014] **MSc** in Industrial Engineering, Urmia University, Urmia, Iran.

Thesis: *Harmony Search Algorithm for Optimization of Multi-Objective Fuzzy Random Portfolio Selection*

Supervisor: Dr. Ali Doniavi

[2008–2012] **BSc** in Industrial Engineering**,** University of Tabriz, Tabriz, Iran.

Thesis: *A Fuzzy Modeling for Fuzzy Portfolio Optimization*

Supervisor: Dr. Javad Nematian

PROFESSIONAL EXPERIENCE

- June 2021 – Present: Part-Time Faculty Member and Researcher, Faculty of Engineering and Natural Sciences, Sabanci University
- June 2019 – June 2021: Postdoctoral Research Fellow, Faculty of Engineering and Natural Sciences, Sabanci University
- March 2019 – June 2019: Assistant Professor, Industrial Engineering Department, Istanbul Kültür University
- August 2014 – December 2018: Research and Teaching Assistant, Department of Industrial Engineering, Koç University

RESEARCH INTERESTS

Vehicle Routing, Green Logistics, Electric Vehicle Routing Problem, Facility Interdiction, Heuristic Optimization, Supply Chain Management, Mathematical Modelling.

PUBLICATIONS

- Mir Ehsan Hesam Sadati, Vahid Akbari and Bülent Çatay, “Electric Vehicle Routing Problem with Flexible Deliveries”. Accepted for publication in ***International Journal of Production Research.***

- Mir Ehsan Hesam Sadati and Bülent Çatay, “A Hybrid Variable Neighborhood Search Approach for the Multi-Depot Green Vehicle Routing Problem”. ***Transportation Research Part E: Logistics and Transportation Review*** (2021), 102293***.***
- Mir Ehsan Hesam Sadati, Bülent Çatay and Deniz Aksen, “An Efficient Variable Neighborhood Search with Tabu Shaking for a Class of Multi-Depot Vehicle Routing Problems”. Accepted for publication in ***Computers & Operations Research*** (2021) (105269).
- Vahid Akbari, Mir Ehsan Hesam Sadati and Ramez Kian, “A Decomposition-Based Heuristic for the Multi-Crew Coordinated Road Restoration Problem for Network Connectivity”. Accepted for publication in ***Transportation Research Part D: Transport and Environment*** (2021), 102854.
- Mir Ehsan Hesam Sadati, Deniz Aksen and Necati Aras, “A Trilevel r-Interdiction Selective Multi-Depot Vehicle Routing Problem With Depot Protection." ***Computers & Operations Research*** (2020), 104996.
- Mir Ehsan Hesam Sadati, Deniz Aksen and Necati Aras, “The *r*-Interdiction Selective Multi-Depot Vehicle Routing Problem”. ***International Transactions in Operational Research***, (2020), 27(2), pp.835-866.
- Mir Ehsan Hesam Sadati and Javad Nematian, "Two-level linear programming for fuzzy random portfolio optimization through possibility and necessity-based model." ***Procedia Economics and Finance*** 5 (2013): 657-666.
- Javad Nematian and Mir Ehsan Hesam Sadati, "New methods for solving a vertex p-center problem with uncertain demand-weighted distance: A real case study." ***International Journal of Industrial Engineering Computations*** 6, no. 2 (2015): 253-266.
- Mir Ehsan Hesam Sadati, Ali Doniavi, and Abbas Samadi, "Possibility theory for multiobjective fuzzy random portfolio optimization." ***Decision Science Letters*** 3, no. 3 (2014): 305-318.
- Mir Ehsan Hesam Sadati and Ali Doniavi, “Optimization of Fuzzy Random Portfolio selection by Implementation of Harmony Search Algorithm." ***International Journal of Engineering Trends and Technology*** 8, no. 2 (2014): 60-64.
- Mir Ehsan Hesam Sadati and Jamshid Bagherzadeh Mohasefi, “The Application of Imperialist Competitive Algorithm for Fuzzy Random Portfolio Selection Problem." ***International Journal of Computer Applications*** 79, no. 9 (2013): 10-14.

RESEARCH IN PROGRESS or UNDER REVIEW

- Mir Ehsan Hesam Sadati and Bülent Çatay, “Electric Vehicle Routing Problem with Mobile Recharging”, ***Under Review.***
- Deniz Aksen, Mir Ehsan Hesam Sadati, “An empirical investigation of four well-known polynomial-size VRP formulations”. ***Under Review.***
- Mir Ehsan Hesam Sadati, “Integrating a Connected Micromobility Infrastructure to the Existing Public Transport “. ***Under Review***
- Vahid Akbari, Mir Ehsan Hesam Sadati, F. Sibel Salman and Davood Shiri, “Optimizing home healthcare routing with a service-oriented objective”. ***in preparation for submission***
- Mir Ehsan Hesam Sadati, Vahid Akbari and Bülent Çatay, “Electric Vehicle Routing Problem with Charging while Driving”. ***in preparation for submission.***
- Necati Aras, Deniz Aksen, Mir Ehsan Hesam Sadati, “Multilevel Facility Interdiction Models in Location Science: A Comprehensive Review”. ***Working Paper.***

INVOLVED PROJECTS

- MeHUB: Integrating a Connected Micromobility Infrastructure to the Existing Public Transport (Link)
- Smart City Strategy of Konya (Link)

TEACHING EXPERIENCE

- **Sabanci University, Turkey (Part-Time Faculty Position)**
  - IE 313, Operations Research III, (Summer 2022)
  - ENS 511, Engineering Optimization, (Spring 2022)
  - IE 454, Supply Chain Analysis, (Fall 2021)

- **Istanbul Kültür University, Turkey (Full Time Faculty Position)**
  - IE 0411, Logistics Systems, 1 semester
  - IE 4503, Engineering Economics, 1 semester

- **Koç University, Turkey (Teaching Assistant)**
  - INDR 201, Discrete Mathematical Structures, 1 semester
  - INDR 252, Applied Statistics, 1 semester
  - INDR 430/530, Decision Analysis, 1 semester
  - MATH 101, Mathematics for Business, 1 semester
  - MGIS 301, Management Information Systems, 2 semesters
  - MGIS 410/510, Electronic Commerce Management, 2 semesters
  - QMBU 310/501, Introduction to Management Science, 2 semesters

AWARDS AND HONORS

- **The most downloaded articles from Computers & Operations Research in the last 90 days (October 15, 2020),** A trilevel r-interdiction selective multi-depot vehicle routing problem with depot protection
- **Top Downloaded Paper 2018-2019**, International Transactions in Operational Research, The *r*-Interdiction Selective Multi-Depot Vehicle Routing Problem
- **Fall 2017 Outstanding Teaching Award Recipient**,
  Graduate School of Science and Engineering, Koç University.
- **Koç University Foundation Scholarship** (2014-present).
- **Ranked 1st** graduate student, Urmia University.
- Certificate of *"Attended and Participated in a Pearson In-Service Workshop on Top Notch at Alef Educational Complex"*, 2013.
- Honor Student in Pre-university Certificate, Tabriz-Iran 2007.

MEMBERSHIP

- Operational Research Society-Turkey (YAD)

REFEREE FOR

- Transportation Research Part E: Logistics and Transportation Review
- Computers & Operations Research
- International Journal of Production Research
- Annals of Operations Research
- Omega: The International Journal of Management Science
- Applied Mathematical Modelling
- Journal of Advanced Transportation
- EURO Journal on Transportation and Logistics
- Arabian Journal for Science and Engineering
- Transactions on Emerging Telecommunications Technologies
- Economic Modelling
- Journal of Contemporary Management
- Global Journal of Technology & Optimization

EDITORIAL BOARD MEMBERSHIP

- Annals of Applied Sciences (journal website)

PRESENTATIONS

- *"Electric Vehicle Routing Problem with Flexible Deliveries".* 32nd European Conference on Operational Research (**EURO 2022**), Aalto University, Espoo, Finland, July 3-6, 2022.
- *"Electric Vehicle Routing Problem with Flexible Deliveries".* 8th meeting of the EURO Working Group on Vehicle Routing and Logistics Optimization (**VeRoLog 2022**), Kühne Logistics University, Hamburg, Germany, June 12-15, 2022.
- *"Multi-Depot Green Vehicle Routing Problem".* 40th National Operations Research and Industrial Engineering Congress (**YAEM 2021**), Boğaziçi University, Industrial Engineering Department, Istanbul, Turkey, July 4-7, 2021.
- *"The r-Interdiction Multi-Depot Vehicle Routing Problem".* 29th European Conference on Operational Research (**EURO 2018**), Valencia, Spain, July 8-11, 2018.
- *"The r-Interdiction Multi-Depot Vehicle Routing Problem with Customer Selection".* Operations Research / Industrial Engineering Doctoral Students Colloquium, Sabanci University Industrial Engineering Department, Istanbul, Turkey, November 2-3, 2017.
- *"The r-Depot Interdiction Vehicle Routing Problem with Capacitated Vehicles and Depots".* 37th National Operations Research and Industrial Engineering Congress (**YAEM 2017**), Yıldız Technical University Industrial Engineering Department, Istanbul, Turkey, July 5-7, 2017.
- *"Comparison of Three Classes of MIP Formulations for the Generic CVRP".* 4th meeting of the EURO Working Group on Vehicle Routing and Logistics Optimization (**VeRoLog 2015**), University of Vienna, Vienna, Austria, June 8-10, 2015.

PhD LEVEL COURSEWORK

- **Koç University, Turkey**

  Department of Industrial Engineering:
  Optimization Models and Algorithms (advanced), Stochastic Models and Applications (advanced), Network Models and Applications, Decision Analysis, Heuristic Methods, Logistic Management.

  Department of Computer Engineering:
  Algorithm Design Analysis.

- **Boğaziçi University, Turkey**

  Department of Industrial Engineering:
  Large Scale Programming.

- **University of Brescia, Italy**

  EURO PhD School on Routing and Logistics (June 2015).

ADVANCED COMPUTER SKILLS

Visual Studio C#, CPLEX, GUROBI, GAMS, MATLAB, Mathematica, Microsoft Excel.

REFERENCES

- Professor Bülent Çatay
  Department of Industrial Engineering, Sabanci University, İstanbul, Turkey
  Email: catay@sabanciuniv.edu
  Phone: (+90) 216 483 9531
- Associate Professor Deniz Aksen
  College of Administrative Sciences and Economics, Koç University, İstanbul, Turkey
  Email: daksen@ku.edu.tr
  Phone: (+90) 212 338 16 84
- Professor Necati Aras
  Department of Industrial Engineering, Boğaziçi University, İstanbul, Turkey
  Email: arasn@boun.edu.tr
  Phone: (+90) 212 359 7506