

Maral Shahmizad

Ph.D. Student in Industrial Engineering

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Experience

- 2021 – ... **Research Assistant**, Oklahoma State University (OSU).
- FALL 2023 **Instructor** of the course Facility and Material Handling System Design, OSU.
- SPRING 2023 **Instructor** of the course Engineering Economic, OSU.
- 2019 – 2020 **Lecturer**, Mazandaran University of Science and Technology.
(TEACHING OPTIMIZATION SOFTWARE)
- 2016– 2019 **Sales Expert**, at Gorgan Zamin Building Materials Factory, Iran
- 2015 – 2016 **Teaching Assistant**, Mazandaran University of Science and Technology.
- 2013 **Internship**, at Pegah Dairy Production Line, Iran
- 2011 – 2013 **Teaching Assistant**, Babol Noshirvani University of Technology.

Education

- 2021 – ... **Ph.D. student, Oklahoma State University, USA.**
INDUSTRIAL ENGINEERING AND MANAGEMENT, GPA : 4.0
Thesis title: *Political districting to minimize county splits.*
- 2014 – 2016 **Master of Science, Mazandaran University of Science and Technology, Iran.**
INDUSTRIAL ENGINEERING, GPA : 3.82
Thesis title: *bi-objective model of vehicle routing problem on a partially distribution with time windows and satisfaction function.*
- 2009 – 2013 **Bachelor of Science, Babol Noshirvani University of Technology, Iran.**
INDUSTRIAL ENGINEERING, GPA : 3.71

Selected Graduate Courses

Optimization

- Network Optimization, Linear Optimization, Integer and combinatorial optimization.

Data Related and Statistics

- Machine Learning, Probability Theory, Big Data Analysis.

Skills

- Languages **English, Farsi.**
- Coding **Python, SQL, \LaTeX , Matlab, Gams, Lingo...**
- Misc. **Research, consultation, teaching, training, \LaTeX typesetting and publishing.**

Awards and Achievements

- 2023
 - Fully funded trip to attend the "**FutureBAProf**" workshop, welcoming new perspectives to Business Analytic (August 7-8), Iowa, USA.
 - Received the title of "**Honorable Mention Best Poster**" at IPCO 2023.
 - Recipient of "**Summer Research Fellowship**" from OSU's Graduate College for \$2500.
- 2016
 - Received the title of "**The Best Article**" at Tehran International Conference.
 - Ranked 2nd** during graduate level.
- 2009
 - Received national undergraduate full **scholarship** in 2009.

Research Publications

Ongoing Projects

- 1 **Shahmizad, M**, McKee., S. C., & Buchanan, A. (2024). County splitting and evidence of gerrymandering in state legislative districts. *In preparation for submission to Political Science Research and Methods in March 2024.*
- 2 **Shahmizad, M**, & Buchanan, A. (2023b). Determining the tradeoffs between population deviation and county splits in political districting. *In preparation for submission to Mathematical Programming Computation in December 2023.*
- 3 **Shahmizad, M**, & Buchanan, A. (2023c). Political districting to maximize whole counties. *In preparation for submission to Operations Research Letters in October 2023.*
- 4 **Shahmizad, M**, & Buchanan, A. (2023d). Political districting to minimize county splits. *Revision submitted to Operations Research in July 2023.*

Professional Service

EDITORIAL SERVICE

- Reviewer
 - Discrete Dynamics in Nature and Society
 - Complexity
 - Computational Intelligence and Neuroscience
 - Mathematical Problems in Engineering

CONFERENCES

- Session Organizer**, 2023 INFORMS Annual Meeting, October 15, 2023 | Arizona.
- Session Organizer**, 2022 INFORMS Annual Meeting, October 16-19, 2022 | Indianapolis.
- Session Chair**, 17th INFORMS Computing Society Conference 2022 | Florida.

PROFESSIONAL SOCIETIES

- President of INFORMS Student Chapter, 2023— present.
- Member of INFORMS Optimization Society, 2021— present.
- Member of INFORMS Society, 2021— present.