

## Education

- 2017–2021 **Ph.D. in Industrial and Systems Engineering**, *Virginia Tech*.
- 2013–2015 **Master of Science in Industrial and Management Systems Engineering**,  
*Amirkabir University of Technology*.  
**Master's Thesis:** A Type-2 Fuzzy Expert System for Osteomyelitis Diagnosis
- 2009–2013 **Bachelor of Science in Industrial and Management Systems Engineering**,  
*Amirkabir University of Technology*.

## Research Interests

Data Analytics, Machine Learning, Computer Vision, System Dynamics

## Awards and Achievements

- April 2017 Being awarded a **Graduate Fellowship** upon the admission to the Ph.D. program at *Virginia Tech*.
- May 2013 Membership of "National **Exceptional Talented Students**" community at *Amirkabir University of Technology*.
- June 2013 Offered **honorary admission to MSc. in Industrial Engineering** at *Amirkabir University of Technology*.
- 2011–2012 **Top student award based on academic performance** and cultural points for three successive semesters
- July 2009 Ranked 864<sup>th</sup> (**top 0.3%**) in nation-wide University Entrance Exam in the major of Mathematics and Physics.

## Related Projects and Activities

- 2019 **Online and machine learning based control** of smartphone battery recycling process, Ph.D. research.
- 2019 **Visual Classification** of Maritime Vessels, "**Data Analytics II**" course.
- 2018 **Rare Event Classification** in Multivariate Time Series, "**Data Analytics I**".
- 2017 **Decision Analysis** for setting up a new Optoelectronics Lab "**Decision Analysis for Engineers**".
- 2010 **Organizing Industrial Visits, Workshops, and Events**, Scientific Association of ISE Department.

## Publications

- 2015 **Systematic Bone Infection Detection in Axial Diabetic Foot MRI**.  
*Maede Maftouni, M.H. Fazel Zarandi, I.B. Turksen, N. Ayubi Yazdi.*  
IEEE Conference on Computational Intelligence in Bioinformatics and Computational Biology, 2015.
- 2015 **Type-2 Fuzzy Rule-Based Expert System for Ankylosing Spondylitis Diagnosis**.  
*Maede Maftouni, M.H. Fazel Zarandi, I.B. Turksen, Faeze Roshani.*  
34<sup>th</sup> Annual Conference of North American Fuzzy Information Processing Society NAFIPS, 2015.
- 2015 **Fuzzy Expert System for Prognosis of Breast Cancer Recurrence**, Awarded the Honorable Mention.  
*Faeze Roshani, M.H. Fazel Zarandi, I.B. Turksen, Maede Maftouni.*  
34<sup>th</sup> Annual Conference of North American Fuzzy Information Processing Society NAFIPS, 2015.

## Professional Training and Certificates

- Dec 2019 Graduate **Certificate in Data Analytics** at Virginia Tech.
- April 2016 One-year higher education course entitled "**Project Engineering**" at Tose'eh Institute.
- May 2016 Using **Python** to Access Web Data - University of Michigan at Coursera.org.
- Dec 2015 **Machine Learning** - Stanford University at Coursera.org.

## Computer skills

- Programming PYTHON, MATLAB, C, R, SQL, VBA
- Professional SPSS, VENSIM, OPENCV, ARENA, PRIMAVERA P6

## Teaching Experience

- Summer 2019 Teaching Engineering Economy Undergraduate Course, *Virginia Tech*.
- 2017–2018 Teaching Assistant, Operations Research, *Virginia Tech*.
- 2016 Teaching Python fundamentals and data analysis using SPSS, *Scientific Association of ISE Department*.