SAEED NAJAFI ZANGENEH



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EDUCATION

Ph.D. | Industrial Engineering Amirkabir University of Technology (AUT)

M.Sc. | Industrial Engineering Sharif University of Technology (SUT)

B.Sc. | Industrial Engineering Amirkabir University of Technology (AUT)

RESEARCH INTERESTS

Decision-Making Game Theory System Simulation / Optimization Human Resource Management

PROFESSIONAL ACADEMIC EXPERIENCE

Researcher

Ecole Polytechnique

 Doing research, preparing and publishing scientific papers, participating in seminars, conferences, and workshops

Senior Researcher

IEPRC of Amirkabir University of Technology

- A Research Center in Productivity and Industrial Engineering Studies
- Project Manager of more than 20 research projects (focusing on Strategic Planning, Data Analysis, Innovation and digitalization, Human Resource Performance Evaluation, Competency Models, Business Process Re-engineering, etc.) in Iranian companies.
- Leading teams of 5 to 50 people in research activities.
- Supervision of \approx 20 master/bachelor's thesis and internships.
- Published 5 peer-reviewed scientific papers in renowned international journals and conferences.

SKILLS

Soft Skills: Problem-solving, Critical thinking, Interpersonal, Communication, Judgment and Decision Making Mathematical Frameworks: Game Theory, Linear and Stochastic Optimization, (Meta-) Heuristics, Monte-Carlo Simulation, Machine Learning, Deep Learning Languages: Python, MATLAB, GAMS

Data Analysis: NumPy, Pandas, SciPy, Matplotlib, etc.

Sept. 2018 – Present Tehran, Iran Sept. 2013 – Jan. 2016 Tehran, Iran Sept. 2007 – Jul. 2012 Tehran, Iran

Sept. 2013 – Aug. 2022 Tehran, Iran

Sept. 2022 – Present

Paris, France

HONORS AND AWARDS

| PAUSE Program Scholarship Winner of the Full Package Scholarship (€24,000) as a Researcher at Ecole Polytechnique/CREST. | Sep. 2023 Paris, France |
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| Erasmus Plus Scholarship | Sep. 2022 |
| Winner of the Full Package Scholarship (€6,000) as an Intern at Ecole Polytechnique. | Paris, France |
| Distinguished PhD Student | May 2019 |
| Ranked 1th as a distinguished PhD student among 22 competitors. | Tehran, Iran |
| National Elite Foundation Award Winner of the Military Service Award from the National Elite Foundation of Iran. | Apr. 2015 Tehran, Iran |
| Top 0.08% of candidates in the National University Entrance Exam (Konkour) Ranked 16th in National M.Sc. Entrance Exam among more than 19,000 competitors. | June 2013 Tehran, Iran |
| Top 0.23% of candidates in the National University Entrance Exam (Konkour) Ranked 812 in National B.Sc. Entrance Exam among more than 350,000 competitors. | June 2006 Tehran, Iran |
| Teaching Assistance | |
| Knowledge Management | 2020 - 2021 |
| Prof. Abbas Afrazeh, Amirkabir University of Technology (AUT) | Tehran, Iran |
| Human Resource Management | 2019 - 2020 |
| Prof. Naser Shams, Amirkabir University of Technology (AUT) | Tehran, Iran |
| Micro Economics | 2017 - 2018 |
| Prof. Naser Shams, Amirkabir University of Technology (AUT) | Tehran, Iran |
| Principles of Economics | 2016 - 2017 |
| Prof. Naser Shams, Amirkabir University of Technology (AUT) | Tehran, Iran |
| Conferences Attendance | |
| National Award for Logistics and Supply Chain | Oct. 2019 |
| Executive Secretary, Amirkabir University of Technology (AUT) | Tehran, Iran |
| Water Resources Policymakers Conferences | Feb. 2015 |
| Executive Secretary, Amirkabir University of Technology (AUT) | Tehran, Iran |
| National Conference in Cost Management | Feb. 2014 |
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PROFESSIONAL CERTIFICATIONS

Machine Learning and Data Science, 2020 EFQM Excellence Model, 2016 Business Processes Design with the APQC Standard, 2014 Microsoft Project (MSP), 2012 Microsoft Office, 2012

Executive Secretary, Amirkabir University of Technology (AUT)

LANGUAGES

English: Highly proficient in spoken and written skills **Persian**: Mothertounge

PATENTS

Almas pakan Tak Vista company's activities are to commercialize my patents:

- Production of biological adsorbents from aquatic organisms in a completely independent environment by the breeding method, form I.R.R Patent 90519, Nov. 2016
- The process of using biological adsorbents to absorb all organic pollutants and heavy metals from industrial and municipal effluents and recovery of precious metals, form I.R.R Patent 89594, Aug. 2016

Tehran, Iran

PUBLICATIONS

[1] S. Najafi-Zangeneh, N. Shams, A. Arjomandi-Nezhad and E. Hassannayebi. "A Hybrid Machine Learning and Optimization Model to Minimize the Total Cost of BRT Brake Components." Advanced Transportation, 2021.
[2] S. Najafi-Zangeneh, N. Shams, A. Arjomandi-Nezhad and S. Hashemkhani Zolfani. "An Improved Machine Learning-Based Employees Attrition Prediction Framework with Emphasis on Feature Selection." Mathematics, 2021.

[3] S. Najafi-Zangeneh, N. Shams and A. Arjomandi-Nezhad. "A two-step Best-Worst Method (BWM) and K-Means clustering recommender system framework." 2nd International Workshop on Best Worst Method, 2021.
[4] S. Najafi-Zangeneh, N. Shams, P. Azizi and A. Eshraghnia Jahromi. "Optimizing the Quality of Construction Projects Based on System Reliability Theory Using Improved Min-Max Ant Colony Algorithm." Journal of Structural and Construction Engineering (JSCE), 2018.

[5] S. Najafi-Zangeneh, N. Shams, A. Nabaviyeh and A. Eshraghnia Jahromi. "Determination of Optimal Capacity of Human Resource in Repair Shop Taking into Account the Reliability of the System, Case Study of Tehran Bus Rapid Transportation System (BRT)." Iranian Electric Industry Journal of Quality and Productivity, 2017.
[6] S. Najafi-Zangeneh, N. Shams and M. A. Rostami. "Presenting the stock portfolio model by ethical and social considerations using the Fuzzy multi-criteria decision-making." International Conference on Accounting and Management, 2016.

WORKING PAPERS

[1] S. Najafi-Zangeneh, N. Shams, O. Gossner and E. Abassi. "Job-Package Optimization in a Two-Sided Stable-Matching Personnel Selection Problem." International Journal of Industrial Engineering Computations.
[2] S. Najafi-Zangeneh, N. Shams, O. Gossner and E. Abassi. "Optimize Job-Offers in Personnel Selection Problem based on Bounded Rational Decision-Makers."

[3] S. Najafi-Zangeneh, M. Basirat and S. Hashemkhani Zolfani. "Enhancing Attrition Prediction: A Method Integrating Independent Components and Long Short-Term Memory (LSTM) Network." Engineering Applications of Artificial Intelligence Journal.

[4] S. Najafi-Zangeneh, and M. Basirati. "Machine Learning-based E-Commerce Business Customer Churn Prediction Using Extended RFM Metrics." International Journal of Research in Marketing.

References

Prof. Naser Shams, Amirkabir University of Technology Prof. Olivier Gossner, Ecole Polytechnique Prof. Ehsan Hajizadeh, Amirkabir University of Technology

Last update: January 30, 2024