

# Hamid Nakhaei

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in hamid-nakhaei

## Education

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- ▶ **M.Sc. in Industrial Engineering** 2020 - 2023  
*Sharif University of Technology (SUT), Tehran, Iran | GPA: 4/4*  
*Thesis: A Reinforcement Learning Approach for Dynamic Pricing; [Link]*  
*Supervisor: Prof. Shahram Shadrokh*
- ▶ **M.Sc. in Mechanical Engineering** 2017 - 2020  
*SUT, Tehran, Iran | GPA: 3.2/4*  
*Thesis: Mechanical Design and Fabrication of a Parallel Hybrid Vehicle Powertrain Simulator*  
*Supervisor: Prof. Mahmoud Saadat Foumani*
- ▶ **B.Sc. in Mechanical Engineering** 2013 - 2017  
*SUT, Tehran, Iran | GPA: 3.4/4*  
*Thesis: Systematic Design of Oilfield Cementing Trucks*  
*Supervisor: Prof. Jamal Arghavani*

## Selected Courses

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Operations Analytics: 20/20  
Healthcare Information System: 19.5/20  
Stochastic Programming: 19.5/20  
Operations Research 2: 18.7/20  
Forecasting and Time Series Analysis: 18.6/20

## Research Interests

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- ▶ **Applications**  
Supply Chain Management, Revenue Management, Healthcare Operations
- ▶ **Methodologies**  
Stochastic Modelling, Optimization under Uncertainty, Reinforcement Learning

## Papers

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### Work in Progress

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A Reinforcement Learning Approach for Demand Response Dynamic Pricing 2024  
with Shahram Shadrokh

## Honors & Awards

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Ranked **1<sup>st</sup>** among the graduating class of 2022, Industrial Engineering Department, SUT 2022  
Ranked **4<sup>th</sup>** in the University Entrance Exam for master's degree in Industrial Engineering 2020

## Experience

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### Teaching Experience (TA) \_\_\_\_\_

Operations Research 2, Mohammad Modarres Yazdi	Winter 2022, Fall 2022
Theory of Probability and Its Applications, Seyed Taghi Akhavan Niaki	Fall 2021, Winter 2022
Operations Analytics, Nafiseh Sedghi	Winter 2022
Microeconomics 1, Mohammad Vesal	Fall 2021

### Professional Experience \_\_\_\_\_

Sales Planning Analyst, Solico Group, Tehran, Iran	Sep. 2022 - July 2023
Executive Team Member, Sharif Entrepreneurship Center, Tehran, Iran	Jan. 2016 - Dec. 2017
Intern (Production Department), Iran Khodro Company, Tehran, Iran	July 2015 - Sep. 2015

## Academic Projects

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Daily surgery demand forecasting in an operating room; <a href="#">[Link]</a> Programming language: R	2021
Earning manipulation detection using different classifiers; <a href="#">[Link]</a> Programming language: R	2021
Electricity demand forecasting using time series methods; <a href="#">[Link]</a> Programming language: Python	2021
Prediction of hotel booking cancellations using machine learning algorithms; <a href="#">[Link]</a> Programming language: R	2021
Diabetes prediction using Naive Bayes, random forest, and logistic regression; <a href="#">[Link]</a> Programming language: Python	2020

## Skills

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### ► Computer Skills

- ◇ **Programming Languages:** Python, R, MATLAB,  $\text{\LaTeX}$
- ◇ **Modelling:** Visio, CPLEX
- ◇ **Data Analysis:** PowerBI, Minitab, Microsoft Excel

### ► Language Skills

- ◇ **Persian:** Native
- ◇ **English:** Fluent  
TOEFL iBT: 102/120

## Workshops

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Statistics in Data Science using Minitab and R, Tose'e Institute  
IBM Data Science Professional Certificate, IBM, Coursera

## References

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| ◇ Professor Shahram Shadrokh<br>shadrokh@sharif.edu       | ◇ Professor Mohammad Modarres Yazdi<br>modarres@sharif.edu |
| ◇ Professor Seyed Taghi Akhavan Niaki<br>niaki@sharif.edu | ◇ Professor Mohammad Vesal<br>m.vesal@sharif.edu           |