

Hamid Nakhaei

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in hamid-nakhaei

Education

- ▶ **M.Sc. in Industrial Engineering - Macro Systems** 2020 - 2023
Sharif University of Technology (SUT), Tehran, Iran | GPA: 4/4
Thesis: A Reinforcement Learning Approach for Dynamic Pricing (Case Study: Iran's Electrical Power Grid); [\[Link\]](#)
Supervisor: Prof. Shahram Shadrokh
- ▶ **M.Sc. in Mechanical Engineering - Applied Design** 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

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

- ▶ **Applications**
Healthcare Operations, Treatment Planning, Dynamic Pricing
- ▶ **Methodologies**
Stochastic Modelling, Optimization under Uncertainty, Reinforcement Learning

Papers

Work in Progress

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

Honors & Awards

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

Experiences

Teaching Experience (TA) _____

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

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

Skills

► Computer Skills

- ◇ **Programming Languages:** Python, R, MATLAB, \LaTeX
- ◇ **Modelling:** Visual Paradigm, Visio, GAMS, CPLEX
- ◇ **Data Analysis:** PowerBI, Minitab, Microsoft Excel

► Language Skills

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

Workshops

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