# Hamid Nakhaei

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### **Education**

► 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\_ 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, Revenue Management **▶** Methodologies Stochastic Modelling, Optimization under Uncertainty, Reinforcement Learning **Papers** Work in Progress \_\_\_

### **Honors & Awards**

with Shahram Shadrokh

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

2024

A Reinforcement Learning Approach for Demand Response Dynamic Pricing

## **Experience**

### Teaching Experience (TA)

Operations Research 2, Mohammad Modarres YazdiWinter 2022, Fall 2022Theory of Probability and Its Applications, Seyed Taghi Akhavan NiakiFall 2021, Winter 2022Operations Analytics, Nafiseh SedghiWinter 2022Microeconomics 1, Mohammad VesalFall 2021

### Professional Experience

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

# **Academic Projects**

Daily surgery demand forecasting in an operating room; [Link]	2021
Programming language: R	

Earning manipulation detection using different classifiers; [Link]
Programming language: R

Electricity demand forecasting using time series methods; [Link]
Programming language: Python

Prediction of hotel booking cancellations using machine learning algorithms; [Link]
Programming language: R

Diabetes prediction using Naive Bayes, random forest, and logistic regression; [Link]
Programming language: Python

#### Skills

#### **▶** Computer Skills

- ♦ **Programming Languages:** Python, R, MATLAB, Languages:
- ♦ **Modelling:** Visio, 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

- Professor Shahram Shadrokh shadrokh@sharif.edu
- Professor Seyed Taghi Akhavan Niaki niaki@sharif.edu
- Professor Mohammad Modarres Yazdi modarres@sharif.edu
- Professor Mohammad Vesal m.vesal@sharif.edu