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 (Case Study: Iran's Electrical Power *Grid*); [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 ___ 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

Ranked 4^{th} in the University Entrance Exam for master's degree in Industrial Engineering

2022

2020

Experiences

Teaching Experience (TA)

Operations Research 2, Mohammad Modarres YazdiSpring 2022, Fall 2022Theory of Probability and Its Applications, Seyed Taghi Akhavan NiakiFall 2021, Spring 2022Operations Analytics, Nafiseh SedghiSpring 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]
Programming language: R

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

Electricity demand forecasting in Iran 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, ੴEX
- ♦ **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