



Ahmad Salehiyan

Industrial Engineer

Education

• K. N. Toosi University of Technology

- Master of Science in Industrial Engineering-Systems Optimization (2019-2022)
- Supervisor: Abdollah Aghaie
- Thesis: "Predictive Maintenance of Advanced Industrial Machines using Artificial Intelligence Techniques."
- Overall GPA: 3.42/4.00 (16.53/20) | Major courses GPA: 3.50/4.00
- Selected Courses:

Design of experiments (18.85/20)

Integer Variables (18.75/20)

• Qazvin Islamic Azad University

- Bachelor of Science in Industrial Engineering (2014-2018)
- Thesis: "Feasibility Study Industrial Company Manufacturing of Carbonless Paper."
- Overall GPA: 3.52/4.00 (17.06/20) | Major courses GPA: 3.65/4.00
- Selected Courses:

Computer Programming (19.25/20)

Operations Research I (17.50/20)

Engineering statistics (17/20)

Operations Research II (19/20)

Maintenance Planning (20/20)

Principles of Simulation (20/20)

Publication

- **Salehiyan, A.**, Aghaei, A., Amouei, A. (2022). Discover Hidden Relationships and Patterns in Failure of Computer Numerical Control Equipment by Using Apriori Algorithm. The 3rd International Conference on Challenges and New Solutions in Industrial Engineering, Management and Accounting. [Accepted]
- Aghaei, A., **Salehiyan, A.** (2021). Prioritizing Equipment Maintenance Programs by Clustering Algorithms The 14th International Conference of Iranian Operations Research Society.
- **Salehiyan, A.**, Aghaei, A., Mohammadi, Z. (2022). Implementation of Predictive Maintenance by Using LSTM and GRU Artificial Neural Networks, and Mathematical Cost Model. [Submitted]
- **Salehiyan, A.**, Aghaei, A., Mohammadi, Z., "Development of Fault Diagnosis Models Based on Predicting Vibration Signals of a Computer Numerical Control Machine." [Under Publication]

Language Skills

- IELTS Overall: 6.5 (listening: 7 | reading: 6.5 | writing: 6 | speaking: 6)
- Persian—Native or bilingual proficiency

Oct.2022

Contact:

📍 Tehran, Iran.

☎ 009893398006775

✉ A_Salehiyan@email.kntu.ac.ir

🌐 www.ASalehiyan.com

Top Skills:

- Python
- GAMS
- Power BI
- Excel

Research Interests:

- Optimization
- Maintenance
- Machine Learning
- Scheduling

Honors and Awards:

- Ranked 9th among Systems Optimization M.Sc. students⁽²⁰²¹⁾
- Ranked 4th among Industrial Engineering B.Sc. Students⁽²⁰¹⁷⁾

Teaching and Research Experience

- **K. N. Toosi University of Technology** Oct.2021 – Present
 - Teacher and Research Assistant (Dr. Abdollah Aghaie)
- **Teaching Microsoft Excel** Sep.2019 - Oct.2022
 - A personal tutor of one of the employees in a private company

Work Experience

- **Karin Crane Company** Sep. 2019 - Oct.2019
 - Project Management, Creating Quality Control Inspection Forms, and Operation Process Charts
- **Turbine Engineering and Manufacturing Company (TUGA)** Oct. 2017-Sep. 2018
 - Data mining, Benchmarking, Creating Management Dashboards & Advanced Reports

Certificates and Skills

Certifications:

Weka
Minitab
COMFAR
Excel (Advance)
LATEX
ISO9001:2015
Microsoft Project
Statistical Package for the Social Sciences (SPSS)

Programming languages:

Python
R
JavaScript
jQuery
HTML
CSS

Computer-aided engineering:

GAMS
PostgreSQL
Power BI
Tableau
AutoCAD
SOLIDWORKS

Projects

- **Turbine Engineering and Manufacturing Company (TUGA)** Oct. 2021 – Oct. 2022
 - Advisor: Dr. Abdollah Aghaie
 - Project Title: "Early Fault Detection of Five-axis Numerical Control Tool Machine Based on Data mining Approaches and Similar Tools."
- **Absal Company** Feb. 2020 -Jun 2020
 - Project Title: "Optimization of Paint Coating Process on Galvanized Sheet Using Design and Analysis of Experiments."
- **Carbonless Manufacture Company** Feb. 2019 -Jun 2019
 - Project Title: "Feasibility Study Industrial Company Manufacturing of Carbonless Paper. "

References

Dr. Abdollah Aghaie

Full Professor, Industrial Engineering Department, K. N. Toosi University of Technology, Iran.

Email: aaghaie@kntu.ac.ir | Phone: 00989121487957

Dr. Yaser Samimi

Assistant Professor, Industrial Engineering Department, K. N. Toosi University of Technology, Iran.

Email: y_samimi@kntu.ac.ir | Phone: 00989128387291

Dr. Emad Roghanian

Associate Professor, Industrial Engineering Department, K. N. Toosi University of Technology, Iran.

Email: e_roghanian@kntu.ac.ir | Phone: 00989126994553