

Ahmad Salehiyan

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Education

- **Master of Science in Industrial Engineering-Systems Optimization** 2019-2022
 - K. N. Toosi University of Technology, Tehran, Iran.
 - Supervisor: Abdollah Aghaie
 - Thesis: "Predictive Maintenance of Advanced Industrial Machines by 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 (A ⁺)	Integer Variables (A ⁺)
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- **Bachelor of Science in Industrial Engineering** 2014-2019
 - IslamicAzad University, Qazvin, Iran.
 - Supervisor: Masoud Moshfeghnia
 - 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:

Maintenance Planning (A ⁺)	Operations Research I (A)
Computer Programming (A ⁺)	Operations Research II (A ⁺)
Linear Algebra (A ⁺)	Production Planning (A ⁺)
Project Management (A ⁺)	

Research Interests

- Data Science & Artificial Intelligence
- Statistics
- Signal Processing
- Optimization
- Maintenance

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]

Honors and Awards

- Ranked **9th** among Systems Optimization M.Sc. students **2021**
- Ranked **4nd** among Industrial Engineering B.Sc. students **2017**

Research Experience

K. N. Toosi University of Technology **Oct. 2021 – present**
Teacher and Research Assistant (with Dr. Abdollah Aghaie)

Work Experience

Karin Crane Company **Apr. 2019 – Oct. 2019**

Job Title: Industrial Engineer

- Project Management, Creating Quality Control Inspection Forms and Operation Process Charts

Turbine Engineering and Manufacturing Company **Apr. 2019– Oct. 2019**

Job Title: Maintenance Trainee

- Data mining, Benchmarking, Creating Management Dashboard

Teaching Experience

Teaching Microsoft Excel **Sep. 2019 - Oct. 2022**

- A private tutor of one of the employees in a private company

Certificates and Skills

Certifications:

Statistical Package for the Social Sciences (SPSS)
Minitab
COMFAR
Excel (Advance)
Microsoft Project
Weka
ISO9001:2015
ISO22000

Programming languages:

Python
R
JavaScript
jQuery
HTML
CSS

Computer-aided design/engineering:

GAMS
PostgreSQL
Power BI
Tableau
AutoCAD
SOLIDWORKS
ICDL 1-2

Language Skills

- IELTS Overall: 6.5 (listening: 7 | reading: 6.5 | writing: 6 | speaking: 6) **Oct. 2022**
- Persian—Native or bilingual proficiency

Projects

Turbine Engineering and Manufacturing Company **Mar. 2022 – present**

- Advisor: 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 Form Company**Feb. 2019 -Jun 2019**

- Project Title: "Feasibility Study Industrial Company Manufacturing of Carbonless Paper."

Volunteer Work

- **IranOpen RoboCup**: for helping to hold the RoboCup competitions, Iran

Aug. 2016**References**

Dr. Abdollah Aghaie

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

Associate Professor, Industrial Engineering
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Dr. Yaser Samimi

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