

Ahmad Salehiyan

📍 [Tehran, Iran](#) • ✉ A_Salehiyan@email.kntu.ac.ir • 🌐 www.ASalehiyan.com •  [LinkedIn](#)

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 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 ⁺)
---	-------------------------------------
- **Bachelor of Science in Industrial Engineering** **2014-2018**
 - Islamic Azad 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:

Computer Programming (A ⁺)	Operations Research I (A)
Engineering statistics (A)	Operations Research II (A ⁺)
Maintenance Planning (A ⁺)	Principles of Simulation (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 **4th** among Industrial Engineering B.Sc. students **2017**

Teaching and Research Experience

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

Teaching Microsoft Excel **Sep. 2019 - Oct. 2022**
○ A private tutor of one of the employees in a private company

Work Experience

Karin Crane Company **Apr. 2019 – Oct. 2019**
Job Title: Industrial Engineer
○ Project Management, Creating Quality Control Inspection Forms and Operation Process Charts

Private Engineering and Manufacturing Company **Apr. 2019– Oct. 2019**
Job Title: Maintenance Trainee
○ Data mining, Benchmarking, Creating Management Dashboards & Advanced Reports

Certificates and Skills

Certifications:	Programming languages:	Computer-aided design/engineering:
Statistical Package for the Social Sciences (SPSS)	Python	GAMS
Minitab	R	PostgreSQL
COMFAR	JavaScript	Power BI
Excel (Advance)	jQuery	Tableau
L ^A T _E X	HTML	AutoCAD
Weka	CSS	SOLIDWORKS
ISO9001:2015		
Microsoft Project		

Language Skills

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

Projects

Private 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
Email: aaghaie@kntu.ac.ir

Dr. Emad Roghanian

Associate Professor, Industrial Engineering
Department, K. N. Toosi University of
Technology, Iran
Email: e_roghanian@kntu.ac.ir

Dr. Yaser Samimi

Assistant Professor, Industrial Engineering
Department, K. N. Toosi University of
Technology, Iran
Email: y_samimi@kntu.ac.ir