

Ahmad Salehiyan

📍 [Tehran, Iran](#) • ✉ [A. Salehiyan@email.kntu.ac.ir](mailto: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 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 ⁺)
---	-------------------------------------
- **Bachelor of Science in Industrial Engineering** 2014-2019
 - IslamicAzadUniversity, 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:**

Linear Algebra (A ⁺)	Operations Research I (A)
Project Management (A ⁺)	Operations Research II (A ⁺)
Maintenance Planning (A ⁺)	Production Planning (A ⁺)
	Computer Programming (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*.
- 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 **6th** among Systems Optimization M.Sc. students **2020**

Ranked **4nd** among Industrial Engineering B.Sc. students **2017**

Research Experience

K. N. Toosi University of Technology **Oct. 2021 – present**

Teacher Assistant (with Dr. Abdollah Aghaie)

- Assisting my supervisor with research, marking of exam papers, and other academic activities.

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: A private tutor of one of the people in a private company **Sep. 2019 - Oct. 2022**

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

- English—Professional working proficiency

IELTS: Will be taken on September 2022

- Persian—Native or bilingual proficiency

Projects

Turbine Engineering and Manufacturing Company (TUGA) **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."

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

Dr. Seyed Javad Hosseininezhad

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