



K. N. Toosi University of Technology

ABDOLLAH AGHAIE

عبداله آقائی

Industrial Engineering Faculty
K. N. Toosi University of Technology
Tehran, Iran
AAghaie@kntu.ac.ir

1. EDUCATION تحصیلات

- 1994-1997 **Ph.D.**, Industrial/Manufacturing Engineering, **Loughborough University**, Loughborough, UK. دکتری از دانشگاه لافبرو انگلستان
- 1991-1993 **M.Sc.**, Industrial/Manufacturing Engineering, **University of New South Wales**, Sydney, Australia. کارشناسی ارشد از دانشگاه نیوساوت ولز استرالیا
- 1985-1989 **B.Sc.**, Industrial Engineering, **Sharif University of Technology**, Tehran, Iran. کارشناسی از دانشگاه صنعتی شریف

2. ACADEMIC POSITIONS دانشگاه

- 2010-Now **Professor**, Industrial Engineering Faculty, K. N. Toosi University of Technology, Tehran, Iran. استاد
- 2005-2010 **Associate Professor**, Industrial Engineering Faculty, K. N. Toosi University of Technology, Tehran, Iran.
- 1998- 2005 **Assistant Professor**, Industrial Engineering Faculty, K. N. Toosi University of Technology, Tehran, Iran.

3. Current ADMINISTRATIVE ASSIGNMENTS/POSITIONS پست ها

- Feb 2023-Sept 2023 **University Plan, Organizing and Budgeting Manger** (مدیر کل طرح و برنامه دانشگاه)
- Nov 2021- Feb 2023 **University President' Advisor** (مشاور ارشد رئیس دانشگاه)
- 2014-2016 **Head of Planning and System Analysis Group/Dept.** (مدیر گروه صنایع)
2020- April 2023

2011-2013	Vice President of K. N. Toosi University of Technology (قائم مقام دانشگاه)
2010-2011 2001-2033	Head of Industrial Engineering Faculty (رئیس دانشکده صنایع)
2003-2004	Deputy Vice President in Administration and Finance (معاون مالی اداری دانشگاه)

4. PROFESSIONAL ACTIVITIES/MEMBERSHIPS

Feb. 2026-Now 2023	دبیر گروه علوم مهندسی فرهنگستان علوم (1404/11/21) Distinguished National Professor انتخاب استاد نمونه کشوری در سال 1401-1402 Member of Iran Academy of Sciences (Industrial Engineering Division) (عضو وابسته فرهنگستان علوم)
2011-Now	Head of Industrial Engineering Division, Iran Academy of Sciences. (رئیس شاخه مهندسی صنایع فرهنگستان علوم 98/8/11 الی 1402/1/1)
2019- June 2024	
2007- 2018 2023- Now	Member of the Industrial Engineering Committee - Ministry of Science, Research and Technology (عضو کمیته مهندسی صنایع وزارت علوم)
2010- Now	Editorial Members of four Journals (عضو هیئت تحریریه چند ژورنال علمی-پژوهشی)

5. TEACHING EXPERIENCES تدریس

• Stochastic Optimization (بهینه سازی تصادفی سیستم ها)	Postgraduate
• System Analysis and Design (تحلیل سیستم ها)	Postgraduate/Undergraduate
• Queuing Systems (سیستم های صف)	Postgraduate/Undergraduate
• Logistics and Supply chain Principles (اصول مهندسی لجستیک و زنجیره تامین)	Postgraduate/Undergraduate
• Total Quality Management (TQM) and Productivity (مدیریت کیفیت و بهره وری)	Postgraduate/Undergraduate
• Computer Simulation (شبیه سازی کامپیوتری)	Postgraduate/Undergraduate
• Internet-Marketing (بازاریابی اینترنتی)	Postgraduate
• Knowledge Management (مدیریت دانش)	Postgraduate
• Business Planning (طرح کسب و کار)	Postgraduate
• Ergonomics (Human Factors) (ارگونومی)	Undergraduate
• Research Methodologies (روش تحقیق)	Postgraduate

6. RESEARCH INTERESTS تحقیقات

- Modeling and Simulation
- Supply Chain Management and Logistics
- Artificial Intelligence with System and organizational approach
- (Knowledge, Quality, Risk, Crisis) Management
- Productivity
- Organizational Agility
- Processes Improvement
- Organizational structure and Architecture
- Future Study

7. BOOK PUBLICATIONS (IN PERSIAN) کتاب

تالیف

- Aghaie, A. and Dibaie, A, (2026, under publication), **Lean and Intelligence Warehousing**. کتاب انبارداری ناب و هوشمند
- Aghaie, A., Eshaghi, a., (2019), **Queuing Systems**, Tehran, Iran. کتاب سیستم های صف
- Aghaie, A., Lotfi Z., (2016), **Knowledge Management**, Published by K. N. Toosi University of Technology Press, Tehran, Iran. (Text Book). کتاب مدیریت دانش
- Aghaie, A. and Shadkam E., (2012), **Random Numbers and Random Values**, Published by K. N. Toosi University of Technology Press, Tehran, Iran. کتاب اعداد و مقادیر تصادفی
- Aghaie, A., Jokar, N, (2010), **A Review of Production Management and Industrial Engineering Softwares**, Published by Industrial Research and Training Center of Iran Press, Tehran, Iran. کتاب مرور نرم افزارهای مهندسی صنایع

Translated books to Persian:

ترجمه

- Aghaie, A., Hajibabaie H., Karimi, E (2014), Published by **Total Quality Management**, Volume 1, K. N. Toosi University of Technology Press, Tehran, Iran (Text Book)(2nd edition, 2022). کتاب مدیریت کیفیت جامع - جلد 2
- Aghaie, A., Enami, E. and Hajibabaie H., (2014), Published by **Total Quality Management**, Volume 1, K. N. Toosi University of Technology Press, Tehran, Iran (Text Book)(2nd edition, 2012). کتاب مدیریت کیفیت جامع - جلد 1
- Aghaie, A. (2010), **Computer Simulation in Management Science**, Published by K. N. Toosi University of Technology Press, Tehran, Iran. (Text Book) (2nd edition, 2015).

کتاب شبیه سازی کامپیوتری

- **Aghaie, A.,** Hajiyan, M., (2017), *Optimal Supply Chain in Oil, Gas and Power*. The Research Institute of Petroleum Industry Press, Tehran, Iran. کتاب زنجیره تامین بهینه در نفت و گاز و برق
- Karimi, M.M., **Aghaie, A.** and Parsapour E., (2010), *The Decision Book: Fifty Models for Strategic Thinking*, Tisa Press, Tehran, Iran. کتاب تصمیم: 50 مدل برای تفکر استراتژیک
- **Aghaie, A.,** AliRahimi, A, Digital Transformation Now, Daniel R. A. Schallmo • Christopher A. Williams, UNDER REVIEW کتاب تحول دیجیتال

8. دانشجویان دکتری PhD STUDENTS SUPERVISED

1. **Samimi, Yaser** (March 2011), Integrating Statistical Process Control (SPC) Techniques and Probability Models to Develop Model-Based Monitoring Methods for Customer Usage Behavior. (Assistant professor of Industrial Engineering at K N Toosi University of Technology) کنترل آماری فرایند
2. **Etebari, Farhad** (May 2013), Developing Choice-Based Revenue Management Models. (Assistant professor of Industrial Engineering at Azad University) مدیریت درآمد
3. **Asadzade, Shervin** (June 2013), Monitoring and Improving the Reliability in Multistage Processes. (Assistant professor of Industrial Engineering at Azad University) قابلیت اطمینان
4. **Morovatdar, Reza** (September 2013), Fuzzy Network Analysis for Projects with High Level of Risks. سیستم های فازی
5. **Hajiyan, Mojtaba**, (September 2018), Global Supply Chain Management Model Based on the Risk Analysis and Mitigation. (Assistant professor of Industrial Engineering at Allameh University) زنجیره تامین جهانی و ریسک
6. **Nabipour, Elham**, (September 2018), Research area: Resource-Constrained Multi-Project Scheduling Problem under Uncertainty Conditions. برنامه زمان بندی چند پروژه ای
7. **Khalaj, Zeynab**, (2020) Research area: Statistical Adjustment and Uncertainty Quantification of Complex Computer Models. تنظیم آماری و مدل های پیچیده
8. **Zare, MohammadReza**, (2020) Research area: Total Quality Management and Excellence Models in particular in ICT. مدیریت کیفیت و مدل های تعالی
9. **Sharifi, A**, (2021) Research area: Robust optimization for simulation-based problems with a nonconvex objective function: application in inventory control. بهینه سازی استوار
10. **Eshaghi, Amir**, (2023), Research area: Developing data fusion techniques using statistical learning methods to improve condition-based maintenance models. همجوئی داده ها در نگهداری تعمیرات
11. **Soltani, MogamadSaleh**, (In progress), Research area: Development of a data-driven quality management model based on Quality 4.0 principles for creative industries: a study of the cinema industry. مدیریت کیفیت مبتنی بر داده و صنایع خلاق
12. **Zakariyaie, Elham**, (In progress), Research area: Design of a Multivariate Model for Monitoring Systems Reliability Subjected to Shocks. کاربرد قابلیت اطمینان و چند متغیره در مدلسازی شوک ها
13. **Bagheri, Majid**, (In progress), Research area: Supply Chain Management. مدیریت زنجیره تامین

14. **Sayadi, Mohsen**, (In progress), Research area: Processes Optimization. بهینه سازی فرایندها

15. **Sanjari, Mahdi**, (In progress), Research area:

9. JOURNAL/CONFRENCES PUBLICATIONS (ISI and International Journals)

مقالات منتخب سالهای اخیر

Zakaryaie Kermanie , Elham; **Aghaie, Abdollah**; Shahriari, Hamid; 2026, Reliability estimation under autocorrelated cumulative shock damage: A time series modeling approach, RELIABILITY ENGINEERING and SYSTEM SAFETY, Elsevier.

Eshaghi Chaleshtori Amir and **Aghaie Abdollah**, 2024 ,A novel bearing fault diagnosis approach using the Gaussian mixture model and the weighted principal component analysis, RELIABILITY ENGINEERING and SYSTEM SAFETY, Volume 242. Elsevier.

Aghsami Amir ,Samimi Yaser and **Aghaie Abdollah**, 2023, A combined continuous-time Markov chain and queueing-inventory model for a blood transfusion network considering ABO/Rh substitution priority and unreliable screening laboratory, EXPERT SYSTEMS WITH APPLICATIONS, Volume 215.

Jahani Hamed, Eshaghi Chaleshtori Amir, Khaksar Seyed Mohammad Sadegh, **Aghaie Abdollah** and Sheu Jiuh-Biing, 2022,COVID-19 vaccine distribution planning using a congested queueing system—A real case from Australia, TRANSPORTATION RESEARCH PART E-LOGISTICS AND TRANSPORTATION REVIEW ,Volume 163.

Hajian Heidary Mojtaba, **Aghaie, Abdollah**, Mohammadi Zahra and Karimi Mazraeh Shahi Effat, 2022, A Simulation Model to Estimate the Impact of Self-protection and Social Distancing on the Spread of COVID-19 in the Public Transportation (Case Study: Tehran Metro), Journal of QUALITY ENGINEERING AND PRODUCTION OPTIMIZATION, Volume 7.

Aghsami Amir, Samimi Yaser and **Aghaie Abdollah**, 2022, An Integrated Markovian Queueing-Inventory Model in a Single Retailer- Single Supplier Problem with Imperfect Quality and Destructive Testing Acceptance Sampling, ADVANCES IN INDUSTRIAL ENGINEERING (AIE).

Aghsami Amir, Samimi Yaser and **Aghaei Abdollah**, 2021, A novel Markovian queueing-inventory model with imperfect production and inspection processes: A hospital case study, COMPUTERS and INDUSTRIAL ENGINEERING, Volume 162.

Barahimi Amir Hossein , Eydi Alireza and **Aghaie Abdollah**, 2021, Multi-modal urban transit network design considering reliability: multi-objective bi-level optimization ,RELIABILITY ENGINEERING & SYSTEM SAFETY, Volume 216.

Eshaghi Amir and **Aghaie Abdollah**, 2021, Integrating PSO-GA with ANFIS for predictive analytics of confirmed cases of COVID-19 in Iran, JOURNAL OF INDUSTRIAL AND SYSTEMS ENGINEERING.

Ahmadi Mohammad Mahdi, Shahriari Hamid and **Aghaie Abdollah**, 2021, Robust process capability indices for multiple linear profiles, QUALITY AND RELIABILITY ENGINEERING INTERNATIONAL.

Kazemisaboor Amir Hossein, **Aghaie Abdollah** and Salmanzadeh Hamed, 2021, A simulation-based optimisation framework for process plan generation in reconfigurable manufacturing systems (RMSs) in an uncertain environment, INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH.

Khalaj, Z. **Aghaie Abdollah** and Samimi Yaser, 2020, Statistical Adjustment and Calibration of Complex Systems considering Multiple Outputs: Case Study of Laser-Assisted Micromachining Process, SCIENTIA IRANICA, Volume 29.

Barahimi Amir Hossein ,Eydi Alireza and **Aghaie Abdollah** , 2020, Bi-level multi-objective model for existing link capacity expansion problem across urban transportation network considering travel time reliability: presenting dynamic particle swarm algorithm, SADHANA-ACADEMY PROCEEDINGS IN ENGINEERING SCIENCES, Volume 216.

Zare, Mohamadreza, **Aghaie, Abdollah**, Samimi, Yaser, and A.Asl Hadad, 2020, A Novel Excellence Model of the Information and Communications Technology Industry: Case Study on Telecommunications Backbone Network of Iran, INTERNATIONAL JOURNAL OF ENGINEERING, Volume 33.

Eshaghi Chaleshtori Amir, Jahani Hamed and **Aghaie Abdollah**, 2020, Bi-objective optimization approach to a multi-layer location-allocation problem with jockeying, COMPUTERS AND INDUSTRIAL ENGINEERING, Volume 149.

Barahimi Amir Hossein ,Eydi Alireza and **Aghaie Abdollah**, 2021, Calculation of Urban Transportation Network Reliability Considering Correlation Among the Links Comprising a Route, SCIENTIA IRANICA, Volume 216.

Maleki, Fatemeh, Mehri Saied, **Aghaie Abdollah** and Shahriari Hamid, 2020, Robust T2 control chart using median-based estimators, QUALITY AND RELIABILITY ENGINEERING INTERNATIONAL.

E. Nabipoor Afruzi ,A. Aghaie and A.A. Najafi , 2020, Robust optimization for the resource-constrained multi-project scheduling problem with uncertain activity durations, SCIENTIA IRANICA, Volume 27.

Eshaghi Chaleshtori Amir, Jahani Hamed, Aghaie Abdollah and Dmitry Ivanov ,2019, A multi-layer congested facility location problem with consideration of impatient customers in a queuing system, IFAC-PAPERSONLINE, Volume 52.

A. Aghaie and M. Hajian Heidary, 2019,Simulation based optimization of a stochastic supply chain considering supplier disruption: An agent-based modeling and reinforcement learning, SCIENTIA IRANICA, Volume 26.

Nabipoor AfruziElham and Aghaie Abdollah,2019, A Hybridized Metaheuristic Algorithm to Solve the Robust Resource Constrained Multi-Project Scheduling Problem, AUT Journal of Modeling and Simulation, Volume 51.

Mehri, Saied, Ahmadi, Mahdi, **Aghaie Abdollah** and Shariyari, Hamid, Robust process capability indices for multiple linear profiles, QUALITY AND RELIABILITY ENGINEERING INTERNATIONAL.

Sharifi, Abdollah, **Aghaie, Abdollah** and Rahmini Donya, 2021, A simulation-based optimisation framework for process plan generation in reconfigurable manufacturing systems

(RMSs) in an uncertain environment, INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH.

Khalaj, Zeinab, Samimi Yaser and **Aghaie , Abdollah**, 2020, Statistical Adjustment and Calibration of Complex Systems considering Multiple Outputs: Case Study of Laser-Assisted Micromachining Process, Scientia Iranica

Barahimi, Amir Hossian, Eidi Alireza and **Aghaie, Abdollah**, 2020, Bi-level multi-objective model for existing link capacity expansion problem across urban transportation network considering travel time reliability: presenting dynamic particle swarm algorithm, SADHANA-ACADEMY PROCEEDINGS IN ENGINEERING SCIENCES.

Zare, Mohamad reza, **Aghaie, Abdollah**, Samimi Yaser and Hadad, Ahmad, 2020, A Novel Excellence Model of the Information and Communications Technology Industry: Case Study on Telecommunications Backbone Network of Iran, International Journal of Engineering.

Zare, Mohamad reza, **Aghaie, Abdollah**, Samimi Yaser and Hadad, Ahmad, 2020, Customization of Quality Management and Excellence Model of the Information and communications technology industry -The Real Case Study of the Telecommunications Backbone Network of Iran, International Journal of Engineering.

Eshaghi, Amir, **Aghaie, Abdollah** and Jahani , Hamed, 2020, Bi-objective optimization approach to a multi-layer location-allocation problem with jockeying, COMPUTERS and INDUSTRIAL ENGINEERING.

Barahimi, Amir Hossian, Eidi Alireza and **Aghaie, Abdollah**, 2020, Calculation of Urban Transportation Network Reliability Considering Correlation Among the Links Comprising a Route, Scientia Iranica

Maleki, Fatemeh, Mehri, Saied, **Aghaie Abdollah** and Shariyari, Hamid, 2020, Robust T2 control chart using median-based estimators, QUALITY AND RELIABILITY ENGINEERING INTERNATIONAL

Nabipour, Elham, **Aghaie, Abdollah**, 2020, Robust optimization for the resource-constrained multi-project scheduling problem with uncertain activity durations, Scientia Iranica

Eshaghi, Amir, **Aghaie, Abdollah**, Jahani , Hamed and Ivanov, Dmitry, 2019, A multi-layer congested facility location problem with consideration of impatient customers in a queuing system, IFAC-PapersOnLine.

Hajiyan, Mojtaba and **Aghaie, Abdollah**, 2019, Simulation based optimization of a stochastic supply chain considering supplier disruption: An agent-based modeling and reinforcement learning, Scientia Iranica.

Nabipour, Elham and **Aghaie, Abdollah**, 2019, A Hybridized Metaheuristic Algorithm to Solve the Robust Resource Constrained Multi-Project Scheduling Problem, AUT Journal of Modeling and Simulation.

Hajiyan, Mojtaba and **Aghaie, Abdollah**, 2019, Risk averse sourcing in a stochastic supply chain: A simulation-optimization approach, COMPUTERS and INDUSTRIAL ENGINEERING.

Hajiyan, Mojtaba and **Aghaie, Abdollah**, 2018, Determination of Criticality Indexes in the Remanufacturing Process A GERT-based Simulation Approach, Journal of Optimization in Industrial Engineering.

Heidary, M.H., **Aghaie, A.** and Jalalimanesh, A., 2018. A simulation–optimization approach

for a multi-period, multi-objective supply chain with demand uncertainty and an option contract. **SIMULATION**, p.0037549718761588.

Eshaghi, A., **Aghaie, A.** (2018) Applying queuing system to optimize the hierarchy location-allocation problem(Considering unreliable congested facilities). **Journal of the operational research society(JORS)**

محمد صالح سلطانی و عبدالله آقایی، 1404، طراحی و توسعه خانه کیفیت صنعت سینما؛ ابزاری برای مدیریت کیفیت تولید فیلم سینمایی، نامه هنرهای نمایشی و موسیقی، دوره 16، شماره 40.

محمد صالح سلطانی و عبدالله آقایی، 1404، توسعه یک مدل مدیریت کیفیت داده محور برای صنایع خلاق، مهندسی صنایع و مدیریت.

محمد رضا زارع، عبدالله آقایی، یاسر صمیمی و احمد حداد، 1399، بررسی معیار های ارتقای مدیریت کیفیت و تعالی صنعت ارتباطات و فناوری اطلاعات با مطالعه موردی شبکه مادر مخابراتی کشور، مهندسی صنایع و مدیریت.
عبداله آقایی و رضا بیرانوند، 1401 طراحی شبکه توزیع اقلام ضروری در شرایط زلزله های بزرگ (مطالعه موردی: شهر تهران)، نشریه پژوهش های مهندسی صنایع در سیستم های تولید.

عبداله آقایی، هانیه غدیری و عماد روغنیان، 1401، مدل سازی و بهینه سازی زنجیره ی تامین زیست توده ی لیگنوسلولزی در شرایط عدم قطعیت، با در نظر گرفتن مسئله ی هاب، مهندسی صنایع و مدیریت.
زینب خلج، عبدالله آقایی و یاسر صمیمی، 1398، تنظیم و کالیبراسیون مدل های پیچیده ی رایانه یی با رویکرد مهندسی-آماري مطالعه ی موردی: ماشین کاری به کمک لیزر، مهندسی مدیریت و صنایع.

درین صفاری، عبدالله آقایی و عماد روغنیان، 1397، ارائه مدل مکان یابی-تخصیص چند سطحی در چارچوب شبکه های صف، نشریه پژوهش های مهندسی صنایع در سیستم های تولید.

عبداله شریفی، عبدالله آقایی و دنیا رحمانی، 1398، شبیه سازی مسئله کنترل موجودی محصولات فسادپذیر با هزینه سفارش دهی متغیر به کمک پویایی های سیستم، نشریه پژوهش های مهندسی صنایع در سیستم های تولید.

محمد رضا زارع، عبدالله آقایی، یاسر صمیمی و احمد حداد، 1398، مدل سازی، کنترل و ارتقاء مدیریت کیفیت سرویس و تعالی ارتباطات و فناوری اطلاعات با مطالعه موردی شبکه مادر مخابراتی کشور، کنترل.

الهام نبی پور و عبدالله آقایی، 1397 رویکرد چندپروژه ای استوار برای حل مسئله زمانبندی چندپروژه ای با محدودیت منابع، نشریه تخصص مهندسی صنایع.

مریم خداوردی و عبدالله آقایی، 1395، توسعه ی مدل استوار چند بازه یی برای مواجهه با عدم قطعیت هیستوگرامی (مطالعه موردی مکان یابی تسهیلات)، مهندسی صنایع و مدیریت.