



#### Saman Aminbakhsh, Ph.D. Associate Professor of Civil Engineering

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#### **EDUCATION**

2013-2018	Middle East Technical University, Civil Engineering, Ph.D.	
2010-2013	Middle East Technical University, Civil Engineering, M.Sc.	
2004-2009	Azad University of Tabriz, Civil Engineering, B.Sc.	

#### **ACADEMIC POSITIONS**

Oct/2025-	Associate Professor, Department of Civil Engineering,
present	Atılım University, Ankara, Turkey
Nov/2018-	Assistant Professor, Department of Civil Engineering,
Oct/2025	Atılım University, Ankara, Turkey
Mar/2014-	Research Assistant, Department of Civil Engineering
Mar/2016	Middle East Technical University, Ankara, Turkey

#### **ADMINISTRATIVE DUTIES**

Jul/2025-	Deputy Director, Graduate School of Natural and Applied Sciences	
present	Atılım University, Ankara, Turkey	
Jan/2019-	Vice Chair, Department of Civil Engineering,	
Jan/2023	Atılım University, Ankara, Turkey	
Jan/2019- Jan/2023	1	

# **HONORS & AWARDS**

1	Scientific Publication Award, Atılım University, 2024		
2	Outstanding Reviewer Certificate awarded by American Society of Civil Engineers (ASCE), 2023		
3	Outstanding Reviewer Certificate awarded by American Society of Civil Engineers (ASCE), 2022		
4	Outstanding Reviewer Certificate awarded by American Society of Civil Engineers (ASCE), 2021		
5	Highest Cited Research Certificate awarded by <i>Elsevier</i> , 2016		

#### **RESEARCH INTERESTS**

1	Multi-Objective Optimization
2	Resource Leveling
3	Resource Constraint Optimization
4	Evolutionary Algorithms
5	Safety Research
6	Blockchain Technology

### PROFESSIONAL SERVICE

	Organizing Committee Member:			
1	• Engineering Sciences and Researches Student Congress 2025, Atılım			
	University			
	Engineering Sciences and Researches Student Congress 2024, Atılım			
	University Scientific Committee Member:			
	8th International Project and Construction Management Conference			
	(IPCMC 2024)			
	Bright Optimizer – International Student Competition in Structural Optimization 2018 present			
	<ul><li>Optimization, 2018-present.</li><li>8th Symposium on Construction Management (TMMOB)</li></ul>			
2	7th International Project and Construction Management Conference			
	(IPCMC 2022)			
	6th International Conference on Harmony Search, Soft Computing and			
	Applications (ICHSA 2020)			
	6th International Project and Construction Management Conference (IPCMC 2020)			
	Reviewer:			
	Applied Soft Computing			
	Automation in Construction			
	Canadian Journal of Civil Engineering			
3	Cluster Computing			
	Computer Modeling in Engineering & Sciences			
	Discover Computing			
	Engineering, Construction and Architectural Management     Engineering, Construction and Architectural Management			
	Environmental Quality Management			

Evolutionary Intelligence
IEEE – Access
IEEE – Transactions on Engineering Management
IEEE – Transactions on Evolutionary Computation
International Journal of Computational Intelligence Systems
International Journal of Occupational Safety and Ergonomics
Iranian Journal of Management Studies
Journal of Construction Engineering and Management – ASCE
Journal of Construction Engineering, Management & Innovation
Journal of Industrial Information Integration
Scientific Reports
The Journal of Supercomputing

### PUBLICATIONS INDEXED IN SCI-E/SSCI/ESCI

1	Aminbakhsh S., Sönmez R., & Atan T. (2025). ε-Constraint Procedures for Pareto Front Optimization of Large Size Discrete Time/Cost Trade-Off Problem, <i>European Journal of Operational Research</i> , 322 (3), 753-769. https://doi.org/10.1016/j.ejor.2024.11.032
2	Azad S. K., Aminbakhsh S., & Gandomi, A. H. (2024). An enhanced guided stochastic search with repair deceleration mechanism for very high-dimensional optimization problems of steel double-layer grids, <i>Structural and Multidisciplinary Optimization</i> , 67 (12), 1-24, https://doi.org/10.1007/s00158-024-03898-5
3	Aminbakhsh S. & Abdulsattar, A. M. (2024). Optimizing Three-Dimensional Trade-Off Problem of Time-Cost-Quality over Multi-Mode Projects with Generalized Logic, <i>Buildings</i> , 14 (6), 1676, DOI: 10.3390/buildings14061676
4	Aminbakhsh S. & Ahmed A. (2024). Optimization-based Scheduling of Construction Projects with Generalized Precedence Relationships: A Real-Life Case Study, Scientia Iranica, 31 (19), https://doi.org/10.24200/sci.2023.59493.6275
5	Aminbakhsh S. (2024). Effects of topological structure of project network on computational cost. <i>Journal of Construction Engineering, Management &amp; Innovation</i> , 7 (3), 247-265, DOI: 10.31462/jcemi.2024.03247265
6	Ahmadisheykhsarmast S., Aminbakhsh S., Sonmez R., & Uysal F. (2023). A Transformative Solution for Construction Safety: Blockchain-based System for Accident Information Management. <i>Journal of Industrial Information Integration</i> , 100491, DOI: 10.1016/j.jii.2023.100491
7	Albayati N.H.F & Aminbakhsh S. (2023). Resource allocation capabilities of commercial project management software packages for resource leveling and resource constrained project scheduling problems: A comparative study. <i>Journal of Construction Engineering, Management &amp; Innovation</i> , 6 (2), 104-123, DOI: 10.31462/jcemi.2023.02104123
8	Azad S. K. & Aminbakhsh S. (2022). ε-constraint guided stochastic search with successive seeding for multi-objective optimization of large-scale steel double-layer grids. <i>Journal of Building Engineering</i> , 46, 103767, DOI: 10.1016/j.jobe.2021.103767

9	Azad S. K., Aminbakhsh S., & Shaban S. S. S. (2021). Multi-stage guided stochastic search for optimization and standardization of free-form steel double-layer grids. <i>Structures</i> , 34, 678-699, DOI: 10.1016/j.istruc.2021.07.068	
10	Azad S. K. & Aminbakhsh S. (2021). High-dimensional optimization of large-scale steel truss structures using guided stochastic search. <i>Structures</i> , 33, 1439-1456, DOI: 10.1016/j.istruc.2021.05.035	
11	Sönmez R., Aminbakhsh S., & Atan T. (2020). Activity Uncrashing Heuristic with Noncritical Activity Rescheduling Method for the Discrete Time-Cost Trade-Off Problem. <i>Journal of Construction Engineering and Management</i> , ASCE, 146 (8), 04020084, DOI: 10.1061/(ASCE)CO.1943-7862.0001870	
12	Aminbakhsh S. & Sönmez R. (2017). A Pareto Front Particle Swarm Optimizer for Discrete Time-Cost Trade-Off Problem. <i>Journal of Computing in Civil Engineering</i> , ASCE, 31 (1), 04016040, DOI: 10.1061/(asce)cp.1943-5487.0000606	
13	Aminbakhsh S. & Sönmez R. (2016). Discrete Particle Swarm Optimization Method for the Large-Scale Discrete Time-Cost Trade-Off Problem. <i>Expert Systems with Applications</i> , 51, 177–185, DOI: 10.1016/j.eswa.2015.12.041	
14	Aminbakhsh, S., Gündüz, M., & Sönmez, R. (2013). Safety risk assessment using analytic hierarchy process (AHP) during planning and budgeting of construction projects. <i>Journal of Safety Research</i> , 46, 99-105, DOI: 10.1016/j.jsr.2013.05.003	

# CONFERENCE PRESENTATIONS

1	Latifiilkhechi L., Aminbakhsh S., & Akcay, E.C. (2025). Drivers for Adopting 3D Printing Technology in Turkiye. 2025 European Conference on Computing in Construction ( <i>CIB W78 Conference on IT in Construction</i> ), Porto, Portugal.
2	Latifiilkhechi L., Aminbakhsh S., & Akcay, E.C. (2024). Investigating the Barriers to the Adoption of 3D Printing Technology in the Turkish Construction Industry. The International Conference on Computing in Civil and Building Engineering ( <i>ICCCBE 2024</i> ), Montreal, Canada.
3	Seyisoglu B., Sönmez R., & Aminbakhsh S. (2024). Pareto Front Optimization of Time and Cost: Application of Multi-Objective Optimization in Multi-Project Management, 8th International Project and Construction Management Conference ( <i>IPCMC</i> ), Istanbul, Türkiye.
4	Aminbakhsh S. (2023). An ε-Constraint Method with Adaptive Mode Elimination Scheme for Multi-Objective Mixed Integer Programming, <i>Creative Construction Conference (CCC2023)</i> , Budapest, Hungary.
5	Al-Humairi E.R.E, Lotfi B., & Aminbakhsh S. (2022). Development of an ontology based dynamic process planning and Scheduling methodology for discrete manufacturing systems, 19th International Conference on Machine Design and Production (UMTIK 2022), Cappadocia, Turkey.
6	Aminbakhsh S. & Sönmez R. (2018). Integrating a Meta-Heuristic Method into Microsoft Project for Time-Cost Trade-off Analyses, 5th International Project and Construction Management Conference (IPCMC), Kyrenia, Cyprus.

7	Seyisoğlu, B., Aminbakhsh S., & Sönmez R. (2018). A Heuristic for Resource-Constrained Multi-Project Discrete Time-Cost Trade-Off Problem, 5th International Project and Construction Management Conference (IPCMC), Kyrenia, Cyprus.
8	Aminbakhsh S., Sönmez R. & Atan T. (2017). An Efficient Heuristic Method for Pareto Oriented Optimization of Time-Cost Trade-Off Problem for Construction Projects. <i>Procs. IO2017 The XVIII Congress of the Portuguese Association of Operational Research</i> , Valença, Portugal.
9	Aminbakhsh S., Sönmez R., & Bilir M., Tamsayılı Doğrusal Programlama Yöntemiyle Kesikli Zaman-Maliyet Ödünleşim Probleminin Optimal Pareto Çözümü, 4. Proje ve Yapım Yönetimi Ulusal Kongresi, Turkey, 2016.
10	Aminbakhsh S. & Sonmez R., Pareto Oriented Optimization of Discrete Time- Cost Trade-Off Problem Using Particle Swarm Optimization, Procs 31 <sup>st</sup> Annual ARCOM Conference, UK, 2015.
11	Aminbakhsh S, Sönmez R., Iranagh, M.A., & Rezvankhah E., Kuş Sürüsü Optimizasyon Algoritması ile Kesikli Zaman-Maliyet Ödünleşim Probleminin Çözümü, 3. Proje ve Yapım Yönetimi Ulusal Kongresi, Turkey, 2014.
12	Haghgooei A. & Aminbakhsh S., Türk Müteahhitlerin İran İnşaat Sektöründe Karşılaşabilecekleri Risklerin İncelenmesi, 2. Proje ve Yapım Yönetimi Ulusal Kongresi, Turkey, 2012.

#### **BOOK CHAPTER**

Latifiilkhechi L., Aminbakhsh S., & Akcay, Barriers to the Adoption of 3D Printing Technology. In: Francis, A., Miresco, E., M. Information Technology in Civil and Buildin Lecture Notes in Civil Engineering, https://doi.org/10.1007/978-3-031-87364-5_36	nology in the Turkish Construction Melhado, S. (eds) Advances in ling Engineering. ICCCBE 2024. vol 629. Springer, Cham.
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# CITATIONS

Sum of times cited (ISI Web of Science):	500
H-index (ISI Web of Science):	8

### **COURSES GIVEN**

1	Engineering Fundamentals (B.Sc.)
2	Construction Planning and Cost Estimating (B.Sc.)
3	Construction Engineering and Management (B.Sc.)
4	Construction Scheduling and Cost Control (B.Sc.)
5	Introduction to Computers and Information Systems (B.Sc.)
6	Construction Scheduling and Cost Control (M.Sc.)

#### THESES SUPERVISED/CO-SUPERVISED

	GEDIOG-301 ERVIGED
1	Ala Mustafa Shukri Ahmad, 'Harnessing Natural Language Processing for Contract Analysis in Project Sustainability Assessment', Ph.D., Atılım University, ongoing.
2	Leva Latifechiilkhechi, 'Exploring the drivers and barriers to adoption of 3D printing technology in the Turkish construction industry', M.Sc., Atılım University, 2025.
3	Elaf Al-Humairi, 'Implementation of Expert Systems in CAPP for Predictive Maintenance in Discrete Manufacturing Systems', M.Sc., Atılım University, 2022.
4	Abdulrahman Abdulsattar, 'A Meta-Heuristic for the Discrete Time-Cost-Quality Trade-Off Problem with Generalized Precedence Relationships', M.Sc., Atılım University, 2021.
5	Noor Albayati, 'A Comparative Study on Resource Leveling Capabilities of Commercial Project Management Software Packages for Projects with Resource Constraints', M.Sc., Atılım University, 2021.
6	Muhanned Dawood, 'Risk Assessment of Construction Projects for Oil and Gas Processing Facilities in Iraq', M.Sc., Atılım University, 2021.
7	Ary Ahmed, 'Genetic-Algorithm-Based Optimization Approach for Time-Cost Trade-Off Problem with Generalized Precedence Relationships', M.Sc., Atılım University, 2020.
8	Başak Seyisoğlu, 'Integrated Resource Leveling and Cash Flow Optimization for Construction Projects Using Symbiotic Organisms Search Algorithm', M.Sc., METU, 2020.