ZEKİ AYAĞ

Curriculum Vitae

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Academic & Industrial Positions	Full Professor of Industrial Enginee Piri Reis University Faculty of Engineering	ering	2023-Present
	Full Professor of Industrial Enginee Kadir Has University Faculty of Engineering and Natural	_	2016-2022
	Director, Kadir Has University Graduate School of Science and En	gineering	2014-2017
	Associate Professor of Industrial Er Kadir Has University Faculty of Engineering and Natural		2008-2016
	Vice Director, Kadir Has University Graduate School of Science and En		2006-2008
	Chairman of Industrial Engineering Kadir Has University Faculty of Engineering and Natural		2006-2015
	Vice Chairman of Industrial Engine Kadir Has University Faculty of Engineering and Natural	_	2006-2006
	Assistant Professor of Industrial Er Kadir Has University Faculty of Engineering and Natural		2005-2008
	Assistant Professor of Industrial En İstanbul Kültür University Faculty of Architecture and Engine		2003-2005
	Project Coordinator Webasto AG-Turkey		2002-2003
	Project Coordinator Pimsa A.Ş.		2002-2002
	CAD Engineer, Amcan Castings Ltd Hamilton, Ontario, Canada	I.	2001-2002
	CAD Engineer, Magna Internationa Cam-Slide Manufacturing, Toronto		2000-2001
	Engineering Designer, Mold-Master Georgetown, Ontario, Canada	rs Ltd.	1998-2000

	Cutting Tool Construction Department Chief Makina Takım Endüstrisi A.Ş.	1995-1998
	Quality Assurance Engineer, Pimaş A.Ş.	1993-1995
	Research and Teaching Assistant, İ.T.Ü. Industrial Engineering Department	1989-1993
Institutional Services	MÜDEK Faculty Coordinator, Piri Reis University	2023-P
	Faculty Quality Commission-Member Faculty of Engineering	2024-P
	Faculty Academic Board Member, Piri Reis University Faculty of Engineering	2023-Р
	Senator, Kadir Has University	2014-2017
	Quality Commission Member, Kadir Has University	2015-2017
	Executive Board Member, Kadir Has University Graduate School of Science and Engineering	2009-2017
	Head of Graduate Program in Industrial Engineering Kadir Has University Graduate School of Science and Engineering	2009-2015
	Faculty Executive Board Member, Kadir Has University Faculty of Engineering and Natural Sciences	2009-2015
	Board Member, Kadir Has University Graduate School of Science and Engineering	2008-2017
	Faculty Board Member, Kadir Has University Faculty of Engineering and Natural Sciences	2006-2015 2018-2022
	Faculty Academic Board Member, Kadir Has University Faculty of Engineering and Natural Sciences	2005-2022
Service Outside University	Registered Professional Engineer (P.Eng.), Society of Professional Engineers in Ontario (PEO), Canada	2001-P
	Institutional External Evaluation, Evaluator/Team Leader, YÖK (Council of Higher Education in Turkey) Quality Board	2016-P
	Expert, Eureka-Eurostars R&I Programme of European Commission	2014-P
	Panelist/External Referee, TÜBITAK (Scientific and Technical Research Council of Turkey)	2009-P
	R&D Facility Evaluator, Ministry of Science, Industry and Technology in Turkey	2010-P
	Committee Member/Expert, Associate Professorship Exam, ÜAK (Council of Inter-University) in Turkey	2017-P
	Program Evaluator, MÜDEK (Association of Evaluation and Accreditation of Engineering Programs)	2015-P
	Executive Board Member (substitute) of MÜDEK	2021-2023

	Member, General Assembly of MÜDEK	2017-P
	Mentor, InoSuit (Innovation-Focused Mentorship Project), by TIM (Turkish Exporters Assembly) and Sabancı U.	2017-P
Industrial Positions (Others) Degrees	M.Sc. Study, Siemens A.Ş. Internship, Transtürk Holding A.Ş. (Tezsan A.Ş.)	1990-1991 1988
	Internship, Koç Holding A.Ş. (Otoyol A.Ş.) Registered Professional Engineer (P.Eng.) Association of Professional Engineers in Ontario, Canada	1984 2001-P
	İ.T.Ü., Graduate School of Sci., Eng. & Technology Ph.D. in Industrial Engineering (ABET) (Degree:Excellent)	2003
	İ.T.Ü., Graduate School of Sci., Eng. & Technology M.Sc. in Industrial Engineering (ABET) Engineering Management Program (Degree: Excellent)	1991
	İ.T.Ü., Faculty of Business Administration B.Sc. in Industrial Engineering (ABET) (Degree: Well)	1989
Visiting Positions & Others	Visiting Professor West Pomeranian University, Szczecin, Poland (Erasmus+)	2025
	Visiting Professor Universiti Malaysia-Pahang (UMP), Malaysia (Erasmus+)	2023
	Visiting Professor Ecole Superieure des Industries du Textile et Habillement (ESITH), Morocco (Erasmus+)	2019
	Visiting Professor Mondragon University, Spain (Erasmus+)	2014
	Visiting Professor Vilnius Gediminas Technical University, Lithuania (Erasmus+)	2013
	Visiting Professor Copenhagen University, Denmark (Erasmus+)	2012
	Visiting Professor Konkuk University, South Korea	2011
	Visiting Professor Universidad de La Coruña, Spain (Erasmus+)	2010
	Visiting Researcher University of Toronto, Canada	1998
Professional Affiliations	Union of Chambers of Turkish Engineers and Architects (UCTEA)-UCTEA Chamber of Mechanical Engineers (Registered Professional Engineer)	1989-P
	Association of Prof. Engineers in Ontario (PEO), Canada	2001-P
	(Registered Professional Engineer, P.Eng.) Institute of Industrial Engineers (IIE)	2006-P
	(Senior Member) Society of İstanbul Technical University Alumni	2006-P

(2.5 1)	
(Member) Mechanical Design & Production Society (MATİM), Turkey	2007-P
(Member)	
Society of İstanbul Project Management (İPYD), Turkey (Member)	2007-P
Operational Research Society, Turkey (YAD)	2007-P
(Member) Turkish Industrial Engineers Group (TURK-IE)	2007-P
(Member) Society of Fuzzy Systems, Turkey (BÜSİDE)	2008-P
(Member) Int'lSociety on Multiple Criteria Decision Making (MCDM)	2008-P
(Member)	2008-P
International Association of Engineers (IAENG) (Member)	
IAENG Society of Industrial Engineering (Member)	2008-P
IAENG Society of Operations Research	2008-P
(Member) IAENG Society of Artificial Intelligence	2008-P
(Member)	
IAENG Society of Information System Engineering (Member)	2008-P
Danube Adria Association for Automation and	2012-P
Manufacturing (DAAAM) International	
(Member)	
Ind. Engineering & Operations Research (IEOM) Society (Member)	2014-P
Decision Science Institute (DSI)	2015-P
(Member) Int'l Society for Environmental Information Sciences	2015-P
(Member) theIRED Institute of Research Engineers and Doctors	2015-P
(Senior Member)	20101
Lean Enterprise Institute	2015-P
(Member)	
Int'l Asso. of Risk and Compliance Professionals (IARCP) (Member)	2015-P
Int'l Institute of Social and Economic Sciences (IISES) (Member)	2015-P
International Engineering and Technology Institute (IETI)	2016-P
(Senior Member) MÜDEK (Asso. for Eva. & Accreditation of Eng. Programs)	2017-P
(Member)	
Council of Ind. Eng. Academia Dept.Heads (CIEADH of IIE) (Member)	2013-2014
Institute of Industrial Engineers (IIE) (Student Member)	1999-2000
American Society for Quality (ASQ)	1999-2002
(Student Member) Society of Manufacturing Engineers (SME)	1999-2002
(Student Member) Society of Modeling and Simulation International	2007-2008
(Member)	
North American Fuzzy Infor. Processing Society (NAFIPS) (Member)	2007-2008

Honors & Awards

Honored with the IEOM Distinguished Service Award in recognition and appreciation of your outstanding achievements and contributions and service in industrial engineering and operations management profession, by IEOM Society Int'l at IEOM Conference'22 in İstanbul (2022) (Certificate)

Honored with the 30th Year Award in the Profession by Union of Chambers of Turkish Engineers & Architects (UCTEA)-Chamber of Mechanical Engineers, 2019.

Honored with the 25th Year Award in the Profession by Union of Chambers of Turkish Engineers & Architects (UCTEA)-Chamber of Mechanical Engineers, 2014.

Member of M.Sc. Program Team on Urban Engineering awarded by IBM, the prestigious IBM Shared University Research (SUR) Award, 2013.

Honored by the Dean of Faculty of Engineering and Natural Sciences for the Best Design Project in the 2012-2013 Academic Year, 2013.

Honored by the Dean of Faculty of Engineering and Natural Sciences for the Best Design Project in the 2011-2012 Academic Year, 2012.

Honored by Kadir Has University as "Best Academician Award of the 2010-2011 Academic Year", presented by President H.E. Abdullah Gül, 2011.

Honored by the Chairman of Board of Trustees and Rector of Kadir Has University for the scientific articles published in SCI® in the 2006-2007 Academic Year, 2007.

Honored by the Rector of Kadir Has University for the scientific articles published in SCI® in the 2005-2006 Academic Year, 2006.

Honored by İstanbul Kültür University for the scientific articles published in SCI® in the 2004-2005 Academic Year, 2005.

Received the supporting awards for the published journal articles from Kadir Has University [many times]

Received the supporting awards for the published journal articles from TÜBİTAK (The Scientific and Technological Research Council of Turkey) [many times]

Received the supporting awards for the published journal articles from İstanbul Kültür University [2 times].

Ranked in 1019 with h-index; 11 and total citations; 827, among the listed Turkish academics with 6 or higher h-index, according to the "Ranking Web of Universities", published by Webometrix based on Google Scholar, as of January 2015.

Listed in various editions of Who is Who in Engineering in the World.

Listed in various editions of the Leading Engineers of the World.

Listed in the Who is Who in Turkey (Türkiye'de Kim Kimdir?), the on-line biography bank.

Second awarded by CEO of Makina Takım Endüstrisi A.Ş. for the project, "CAD system application for cutting tool design", İzmit, Turkey, 1998.

Second awarded by CEO of Makina Takım Endüstrisi A.Ş. for the project, "Best gear configuration used in manufacturing of relief angle of taps with twist channels", İzmit, Turkey, 1997.

Skills (Computers)

(ERP) SAP and IAS CANIAS.

(CAD/CAM) AutoCAD, I-DEAS Master Series (C3P), PDGS and CATIA. (Programming) MS-Cobol, QBasic and Fortran.

(MS Office) Word, Excel, PowerPoint, Project and Visio.

(Simulation) Arena. (Others) LINGO, MINITAB.

(Languages) Turkish (native), English (fluent), German (basic)

(Others) Practically knowledge of various measurement tools, and conventional and

CNC machining centers, and NC programming.

Hobbies & Traveling (regularly)
Interests Photography (occasionally)
Gym/Fitness (regularly)

Gym/Fitness (regularly)
Cardio (regularly)

Swimming (occasionally)

Watching movies-in theatre and series (regularly)

SCHOLARLY WORK

Summary Journal Papers: 38

Books: 5

Book Chapters: 1

Conference Proceedings: 97

Technical Reports: 6

Posters: 1

Invited Talks: 10 Presentations: 5

Dissertation & Reports: 3

Others: 6

WoS Core Total Publications: 34

Collection h-index: 17

Citation Sum of Times Cited: 1327
Report Citing Articles: 1059

Citing Articles without Self Citations: 1029

Average Citation per Item: 39.03

Total Number of Citations without Self Citations: 1230 (as of Jan 1 of 2025)

Google Lifetime Citations: 2730 **Scholar** Lifetime *h*-index: 21

Lifetime i10-index: 28 (as of Jan 1 of 2025)

Research Innovation Management and New Product Development

Areas Multiple-Criteria Decision Making

Fuzzy Logic-Based Multiple-Criteria Decision Making

Concept Evaluation in a New Product Development Environment

Simulation of Discrete-Manufacturing Systems Computer Integrated Manufacturing Systems

Journal Yucekaya, A., Ayag, Z. "A hesitant fuzzy linguistic term set-based AHP and TOPSIS for fuel coal type selection problem of industrial facilities", *Journal of*

Multiple-Valued Logic and Soft Computing, Vol. 43, No. 4-6, 473-496, 2024.

Samanlioglu, F., Ayag, Z., Kirkil, G., Yucal, E. "Evaluation of gas-fired combi boilers with HF-AHP-MULTIMOORA", *Applied Computational Intelligence and*

Soft Computing, Vol. 2022.

Ayag, Z. "An intelligent approach to evaluating CAD software packages through hesitant Fuzzy AHP", *Journal of Advanced Manufacturing Systems*, Vol.21, No.2, 317-335, 2022.

- Aldewachi, B., Ayag, Z. "Achieving sustainability in solar energy firms in Turkey through adopting lean principles", *Sustainability*, Vol.14, No.1, 108, 2021.
- Samanlioglu, F., Ayag, Z. "Concept selection with hesitant fuzzy ANP-PROMETHEE II", *Journal of Industrial and Production Engineering*, Vol.38, No.7, 547-560, 2021.
- Ayag, Z. "A comparison study of fuzzy MCDM methods for green concept evaluation", *International Journal of Intelligent Computing and Cybernetics*, Vol.14, No.3, 412-438, 2021.
- Ayag, Z., Samanlioglu, F. "A hesitant fuzzy linguistic terms set-based AHP-TOPSIS approach to evaluate ERP software packages", *International Journal of Intelligent Computing and Cybernetics*, Vol.14, No.1, 54-77, 2021.
- Samanlioglu, F., Ayag, Z. "An intelligent approach for the evaluation of transformers in a power distribution project", *Journal of Intelligent and Fuzzy Systems*, Vol.39, No.3, 4133-4155, 2020.
- Ayag, Z."A fuzzy AHP approach to evaluate CAM software alternatives", *International Journal of Computer Integrated Manufacturing*, Vol.33, No.5, 504-514, 2020.
- Ayag, Z., Samanlioglu, F. "An intelligent approach for the evaluation of innovation projects", *Journal of Intelligent and Fuzzy Systems*, Vol.38, No.1, 905-915, 2020.
- Samanlioglu, F., Ayag, Z. "A fuzzy AHP-VIKOR approach for evaluation of educational use simulation software packages", *Journal of Intelligent and Fuzzy Systems*, Vol.37, No.6, 7699-7710, 2019.
- Samanlioglu, F., Ayag, Z. "A fuzzy AHP-GRA to evaluating energy sources: A case of Turkey", *International Journal of Energy Sector Management*, Vol. 14, No. 1, 40-58, 2019.
- Ayag, Z. "Green concept evaluation through fuzzy AHP-PROMETHEE", International Journal of Business and Management, Vol.7, No.1, 1-10, 2019.
- Ayag, Z., Yucekaya, A. "A fuzzy ANP-Based GRA approach to evaluate ERP alternatives", *International Journal of Enterprise Information Systems*, Vol.15, No.1, 45-68, 2019.
- Samanlioglu, F., Ayag, Z., "A Fuzzy AHP-PROMETHEE II approach to evaluation of solar power plant location alternatives, *Journal of Intelligent and Fuzzy Systems*, Vol.33, No.2., 859-871, 2017.
- Ayag, Z. "An integrated approach to concept evaluation in a new product development", *Journal of Intelligent Manufacturing*, Vol.27, No.5, 991-1005, 2016.
- Ayag, Z., Samanlioglu, F. "An intelligent approach to supplier evaluation in automotive sector", *Journal of Intelligent Manufacturing*, Vol.27, No.4, 889-903, 2016.
- Samanlioglu, F. and Ayag, Z., "Fuzzy ANP-based PROMETHEE II approach for machine tool selection problem", *International Journal of Intelligent and Fuzzy Systems*, Vol.30, 2223-2235, 2016.
- Ayag, Z., "A fuzzy ANP approach to evaluate computer simulation packages", *International Journal of Business and Systems Research*, Vol.10, No.2/3/4, 332-245, 2015.

- Ayag, Z. "An intelligent approach to employee performance evaluation", *International Journal of Fuzzy Systems and Advanced Applications*, Vol.2, 24-32, 2015.
- Ayag, Z., "CAD software evaluation for product design to exchange data in a supply chain network", *International Journal of Supply Chain Management*, Vol.4, No.1, 30-38, 2015.
- Ayag, Z., "A fuzzy analytic hierarchy process to evaluate computer-aided manufacturing software alternatives", *Turkish Journal of Fuzzy Systems*, Vol.5, No.2, 114-127, 2014.
- Ayag, Z., "An intelligent approach to prioritize logistics requirements in food industry", *International Journal of Supply Chain Management*, Vol.3, No.4, 29-38, 2014.
- Ayag, Z., Samanlioglu, F. and Buyukozkan, G., "A fuzzy QFD approach to determine supply chain management strategies in the dairy industry", *Journal of Intelligent Manufacturing*, Vol.24, No.6, 1111-1122, 2013.
- Ayag, Z. and Ozdemir, R.G., "Evaluating machine tool alternatives through modified TOPSIS and alpha-cut based fuzzy ANP", *International Journal of Production Economics*, Vol.140, 630-636, 2012.
- Ayag, Z. and Ozdemir, R.G., "An intelligent approach to machine tool selection through fuzzy analytic network process", *Journal of Intelligent Manufacturing*, Vol.22, No.2, 163-177, 2011.
- Ozdemir, R.G. and Ayag, Z., "An integrated approach to evaluating assembly-line design alternatives with equipment selection", *Production Planning and Control*, Vol.22, No.2, 194-206, 2011.
- Ayag, Z., "A combined fuzzy AHP-simulation approach to CAD software selection", *International Journal of General Systems*, Vol.39, No.7, 731-756, 2010.
- Ayag, Z. and Ozdemir, R.G., "A hybrid approach to concept selection through fuzzy analytic network process", *Computers and Industrial Engineering*, Vol.56, No.1, 368-379, 2009.
- Ayag, Z. and Ozdemir, R.G., "A combined fuzzy AHP-goal programming approach to assembly-line selection", *Journal of Intelligent and Fuzzy Systems*, Vol.18, No.4, 345-362, 2007.
- Ayag, Z. and Ozdemir, R.G., "An analytic hierarchy process-based approach to concept evaluation in a new product development environment", *Journal of Engineering Design*, Vol.18, No.3, 209-226, 2007.
- Ayag, Z., "A hybrid approach to machine tool selection through AHP and simulation", *International Journal of Production Research*, Vol.45, No.9, 2029-2050, 2007.
- Ayag, Z. and Ozdemir, R.G., "An intelligent approach to ERP software selection through fuzzy ANP", *International Journal of Production Research*, Vol.45, No.10, 2169-2194, 2007.
- Ayag, Z. and Ozdemir, R.G., "A fuzzy AHP approach to evaluating machine tool alternatives", *Journal of Intelligent Manufacturing*, Vol.17, No.2, 179-190, 2006.
- Ayag, Z., "A fuzzy AHP-based simulation approach to concept evaluation in a NPD environment", *IIE Transactions*, Vol.37, No.9, 827-842, 2005.

Ayag, Z., "An integrated approach to evaluating conceptual design alternatives in a new product development environment", *International Journal of Production Research*, Vol.43, No.4, 687-713, 2005.

Ayag, Z., "An analytic-hierarchy-process based simulation model for implementation and analysis of computer-aided systems", *International Journal of Production Research*, Vol.40, No.13, 3053-3073, 2002.

Books

The Journal Article Book, "AHP/ANP Applications in Industrial Engineering: Selected Works": Vol.1, Pre-Prints, 2014, unpublished.

The Journal Article Book, "AHP/ANP Applications in Industrial Engineering: Selected Works": Vol. 2, Pre-Prints, 2014, unpublished.

The Conference Paper Book, "Applications in Industrial Engineering: Selected Works": Vol.1, Pre-Prints, 2014, unpublished.

The Conference Paper Book, "Applications in Industrial Engineering: Selected Works": Vol. 2, Pre-Prints, 2014, unpublished.

Introduction of the Book, "AHP/ANP Applications to Concept Evaluation in a New Product Development", Pre-Prints: The First Edition, 2014, unpublished.

Book Chapters

Translation of Chapter X into Turkish – "Resisting Globalization: Critique and Action", in a book of *The Globalization Reader*, Edited by F. J. Lechner and J. Boli, The Second Edition, Blackwell Publishing, 2003.

Conference Proceedings

Ayag, Z. (2024) "An intelligent approach to CAM software selection problem", The 3rd International Scientific and Academic Research Congress (SCAR'24), November 11-13, Cairo, Egypt.

Ayag, Z. (2023) "An intelligent approach to green concept selection problem", The 13 Int'l Conf. on Information, Communication and Management (ICICM'23), November 7-9, Cairo, Egypt.

Ayag, Z. And Samanlioglu, F. (2022) "An intelligent approach for the evaluation of innovation projects", The VIII International Scientific Congress (Innovations'22), June 20-23, Varna, Bulgaria.

Ayag, Z. "An intelligent approach to green concept selection", The Int'l Conf. on Technology, Engineering and Science (ICONTES'21), November 4-7, Antalya, Turkey, 2021.

Ayag, Z. "An integrated approach to green concept evaluation", The 2nd International Conference on Modern Research in Science, Engineering and Technology (ICMRSET'19), April 5-7, Barcelona, Spain, 2019.

Ayag, Z. "Green concept evaluation through fuzzy AHP-PROMETHEE II", The 40th International Academic Conference (IISES'18), June 25-28, Stockholm, Sweden, 2018.

Ayag, Z. "A comparison study of F-AHP based MCDM methods on green concept selection problem", The 5th International Fuzzy Systems Symposium (FUZZYSS'17), October 14-15, Ankara, Turkey, 2017.

Ayag, Z. "Evaluating solar power plant location alternatives through a multiple-criteria decision making method", The 29th International Academic Conference (IISES'17), April 5-8, Rome, Italy, 2017.

- Ayag, Z. "Green concept selection through fuzzy decision making: A comparative study", The 6th Business and Social Science Conference (BSCC'17), August 3-4, Dubrovnik, Croatia, 2017.
- Ayag, Z. "Fuzzy based decision making for green concept evaluation: A comparative study", The 17th International Conference on Fuzzy Systems (FS'16), October 21-23, Rome, Italy, 2016.
- Ayag, Z. "AHP-based approach to evaluate solar power plant location alternatives", The 3rd Business and Research Conference-The Int'l Institute of Social and Economic Sciences (IISES'16), March 22-25, Lisbon, Portugal, 2016.
- Ozdemir, R.G., Ayag, Z., "Integrated fuzzy Monte Carlo simulation model and branch and bound algorithm for solving scheduling in filling process", The 4rd International Fuzzy Systems Symposium (FUZZYSS'15), November 5-6, İstanbul, Turkey, 2015.
- Ayag, Z., "A multiple-criteria decision making method for evaluating solar power plant location alternatives", The 9th Int'l Management Conference (IMC'15), November 5-6, Bucharest, Romania, 2015.
- Ayag, Z., "Quality function deployment approach to evaluate supply chain strategies in Turkish automotive industry", The 14th Int'l Academic Conference-The Int'l Institute of Social and Economic Sciences (IISES'14) October 28-31, La Valetta, Malta, 2014.
- Ayag, Z., "QFD approach to determine supply chain management strategies in automotive sector", The 2nd Int'l Conference on Tourism, Transport, and Logistics (ICTTL'14), April 3-4, Prague, Czech Republic, 2014.
- Ayag, Z., "Technology management in new product development environment", IX. Workshop on Industrial and Management Engineering, The Chamber of Mechanical Engineers in Turkey: Eskisehir Branch, December 6-7, Eskisehir, Turkey, 2013.
- Ayag, Z. and Ozdemir, R.G., "A fuzzy AHP-based approach to employee performance evaluation", The 3rd Int'l Fuzzy Systems Symposium (FUZZYSS'13), October 24-25, İstanbul, Turkey, 2013.
- Durak, M.Y., Ozdemir, R.G., Faki, F. and Ayag, Z., "Selection of sub-contractor for cutting operation in textile industry using fuzzy TOPSIS", The 3rd Int'l Fuzzy Systems Symposium (FUZZYSS'13), October 24-25, İstanbul, Turkey, 2013.
- Ayag, Z., "An intelligent approach to computer-aided design software evaluation", The 3rd Int'l Fuzzy Systems Symposium (FUZZYSS'13), October 24-25, İstanbul, Turkey, 2013.
- Ayag, Z., "A quality function deployment application for airline ground operations management", The 1st Int'l Sustainable Airline Management Conference (ISAMC'14), August 29, İstanbul, Turkey, 2013.
- Ayag, Z., "An intelligent approach to CAM software selection", The 2nd Int'l Conference on Communications, Computing and Control Applications (CCCA'12), December 6-8, Marseilles, France, 2012.
- Yucekaya, A., Ayag, Z. and Samanlioglu, F., "Option pricing for electricity commodity in Turkish Power Market", The 3rd Int'l Conference on Industrial Engineering and Operations Management (IEOM'12), July 3-6, İstanbul, Turkey, 2012.

Yucekaya, A., Samanlioglu, F. and Ayag, Z., "Compressed air energy storage systems: Current, future and operational analysis", The 5th Int'l Mechanical Engineering Forum, June 20-22, Prague, Czech Republic, 2012.

Ayag Z. and Ozdemir, R.G., "CAD software selection through fuzzy AHP", The 5th Int'l Mechanical Engineering Forum, June 20-22, Prague, Czech Republic, 2012.

Ozdemir, R.G. and Ayag, Z., "A two stage approach for distribution network design problem in cosmetic and cleaning industry", The 25th European Conference on Operational Research (EURO'12), July 8-11, Vilnius, Lithuania, 2012.

Ayag, Z., "Concept evaluation through multiple-criteria decision making methods: An evaluation and new approaches", The 8th Int'l DAAAM Baltic Conference (DAAAM'12), April 19-21, Tallinn, Estonia, 2012.

Ayag, Z., Samanlioglu, F. and Yucekaya, A., "Intelligent approach to simulation software evaluation", The 3rd Int'l Conference on Industrial Engineering and Operations Management (IEOM'12), July 3-6, 2012, İstanbul, Turkey, 2012.

Samanlioglu, F., Yucekaya, A. and Ayag, Z., "A network model for location-routing decisions of a logistics company", ISERC Annual Conference and Expo 2012 (ISERC'12), May 19-23, Florida, USA, 2012.

Samanlioglu, F., Ayag, Z. and Yucekaya, A., "A fuzzy TOPSIS Approach for nuclear power plant site selection", The 3rd Annual Conference of the European Decision Sciences Institute (EDSI'12), June 24-27, İstanbul, Turkey, 2012.

Ayag, Z., Samanlioglu, F. and Yucekaya, A., "Concept evaluation in a NPD environment: An integrated approach", The 2nd Int'l Fuzzy Systems Symposium (FUZZYSS`11), November 17-18, Ankara, Turkey, 2011.

Yucekaya, A., Ayag, Z. and Samanlioglu, F., "Evaluating the energy dependency of Balkan countries and the effect of the natural gas pipelines", Int'l Balkan Annual Conference (IBAC'11), May 9-13, Skopje, Macedonia, 2011.

Samanlioglu, F., Ayag, Z., Yucekaya, A., Elibol, D., Depe, İ., Ozdemir, G. and Davarci, C.E., "A location-routing model for regional blood banks", IX. Int'l Logistics and Supply Chain Congress (LM-SCM'11), October 27-29, Yasar University, İzmir, Turkey, 2011.

Yucekaya, A. and Ayag, Z., "Analyzing energy plans of Turkey in the light of increasing energy demand and fuel costs", VIII. Workshop on Industrial and Management Engineering, The Chamber of Mechanical Engineers in Turkey: Bursa Branch, November 24-26, Bursa, Turkey, 2011.

Ayag, Z. and Yucekaya, A., "Evaluating ERP software investments in terms of project management and risk factors", VIII. Workshop on Industrial and Management Engineering, The Chamber of Mechanical Engineers in Turkey: Bursa Branch, November 24-26, Bursa, Turkey, 2011.

Ozdemir, R.G., Ayag, Z. and Karaca, N., "A production planning approach under assembly-line balancing constraints in textile sector", XI. National Production Research Symposium (UAS`11), June 23-24, İstanbul Ticaret University, İstanbul, Turkey, 2011.

Yucekaya, A., Ayag, Z. and Samanlioglu, F., "Price taker bidding for power plants in Turkish Power Market", The 3rd Int'l Conference on Applied

-11-

Operational Research (ICAOR`11), August 24-27, Bahcesehir University, İstanbul, Turkey, 2011.

Samanlioglu, F., Ayag, Z., Yucekaya, A., Kiliç, A., Balkuvar, I. and Çikrikci, Z., "A mathematical model for ambulance location and deployment", The 3rd International Conference on Applied Operational Research (ICAOR`11), August 24-27, Bahcesehir University, İstanbul, Turkey, 2011.

Aydemir, T., Kara, D.G., Kocabacak, I., Yildirim, B. and Ayag, Z., "Evaluating bank alternatives through ANP", XXXI. Operation Research and Industrial Engineering National Congress (YA/EM`11), July 5-7, Sakarya University, Kocaeli, Turkey, 2011.

Ozdemir, R.G., Ayag, Z. and Aksu, G., "An mathematical approach for hierarchical production planning in food packaging industry", XXXI. Operation Research and Industrial Engineering National Congress (YA/EM`11), July 5-7, Sakarya University, İzmit, Turkey, 2011.

Yucekaya, A. and Ayag, Z., "Cost and SO2 minimizing coal resource selection for power plants", The 21st Int'l Conference on Multiple Criteria Decision Making (MCDM'11), June 13-17, Jyvaskyla, Finland, 2011.

Ayag, Z. and Yucekaya, A., "Alpha-cut fuzzy analytic network process based approach to evaluate simulation software packages", The 11th Int'l Symposium on the Analytic Hierarchy Process and Analytic Network Process (ISAHP'11), June 15-18, Sorrento, Naples, Italy, 2011.

Ayag, Z., "Evaluating simulation software alternatives through ANP", The 2th Int'l Conference on Industrial Engineering and Operations Management (IEOM'11), January 22-24, Kuala Lumpur, Malaysia, 2011.

Yucekaya, A., Ayag, Z. and Samanlioglu, F., "Economic evaluation of wind power investments through multi-year simulation and operational constraints", The 2nd Int'l Conference on Nuclear and Renewable Energy Resources (NURER'10), July 4-7, Gazi University, Ankara, Turkey, 2010.

Gun, E., Çetintas, F., Ozdemir, R.G. and Ayag, Z., "Estimation model to determine optimal lot size for a two-stage inventory system", X. National Production Research Symposium (UAS'10), September 16-18, Girne American University, Girne, Cyprus, 2010.

Yucekaya, A., Ayag, Z. and Samanlioglu, F., "ERP software selection through AHP in a project-based production company", X. National Production Research Symposium (UAS'10), September 16-18, Girne American University, Girne, Cyprus, 2010.

Samanlioglu, F., Ayag, Z. and Yucekaya, A., "Multiple-criteria crossdocking model with flexible time window", X. National Production Research Symposium (UAS'10), September 16-18, Girne American University, Girne, Cyprus, 2010.

Ayag, Z., Samanlioglu, F. and Yucekaya, A., "Fuzzy AHP approach to CAD software selection problem", X. National Production Research Symposium (UAS'10), September 16-18, Girne American University, Girne, Cyprus, 2010.

Gokoluk, S.S., Tasdemir, E.E., Kirgoz, D., Çakir, H., Yucekaya, A., Ayag, Z. and Samanlioglu, F., "A mixed integer multi-period capital budgeting model for investment companies", XXX. Operation Research and Industrial Engineering National Congress (YA/EM`10), June 30- July 2, Sabancı University, İstanbul, Turkey, 2010.

Alacan, M., Ozal, C., Cetinkaya, I., Altiok, I., Kol, G., Yucekaya, A., Ayag, Z. and Samanlioglu, F., "A personnel supply planning system for hospital call

centers", XXX. Operation Research and Industrial Engineering National Congress (YA/EM 10), June 30- July 2, Sabancı University, İstanbul, Turkey, 2010.

Samanlioglu, F., Sezenler, E., Ayag, Z. and Yucekaya, A., "A hazardous waste location-routing problem", XXX. Operation Research and Industrial Engineering National Congress (YA/EM`10), June 30- July 2, Sabancı University, İstanbul, Turkey, 2010.

Elibol, D., Depe, İ., Ozdemir, R.G., Davarcı, C.E., Samanlioglu F., Ayag, Z. and Yucekaya, A., "A logistics, location and routing problem of İstanbul Kızılay blood banks", XXX. Operation Research and Industrial Engineering National Congress (YA/EM`10), June 30- July 2, Sabancı University, İstanbul, Turkey, 2010.

Alev, K., Cikrikci, Z., Balkuvar, I., Samanlioglu, F., Ayag, Z. and Yucekaya, A., "A location problem of first aid ambulances", XXX. Operation Research and Industrial Engineering National Congress (YA/EM`10), June 30- July 2, Sabancı University, İstanbul, Turkey, 2010.

Kayakus, O., Ergin, D., Samanlioglu, F., Ayag, Z. and Yucekaya, A., "A mathematical model of pandemic influenza A/H1N1", XXX. Operation Research and Industrial Engineering National Congress (YA/EM`10), June 30-July 2, Sabancı University, İstanbul, Turkey, 2010.

Duman, B., Erdem, M., Isik, E.N., Ozkaya, E., Ayag, Z., Samanlioglu, F. and Yucekaya, A., "Cloth selection problem for passenger seats in public transport vehicles through TOPSIS", XXX. Operation Research and Industrial Engineering National Congress (YA/EM`10), June 30- July 2, Sabancı University, İstanbul, Turkey, 2010.

Has, M., Taskiran, I., Turkyilmaz, M., Ayag, Z., Samanlioglu, F. and Yucekaya, A., "Evaluating shopping center location alternatives through ANP: A case study", XXX. Operation Research and Industrial Engineering National Congress (YA/EM`10), June 30- July 2, Sabancı University, İstanbul, Turkey, 2010.

Ayag, Z., Samanlioglu, F. and Yucekaya, A., "Fuzzy analytic network process approach to shopping center location selection problem", VIII. Int'l Logistics and Supply Chain Congress (LM-SCM'10), November 4-5, Maltepe University, Istanbul, Turkey, 2010.

Ozdemir, R.G. and Ayag, Z., "Fuzzy ANP-based modified TOPSIS for machine tool selection problem", XVI. Int'l Working Seminar on Production Economics (IWSPE'10), March 1-5, Innsbruck, Austria, 2010.

Samanlioglu, F. and Ayag, Z., "Determining master schedule of surgical operations by integer programming: A case study", IIE Annual Conference and Expo 2010 (IERC'10), June 5-9, Cancun, Mexico, 2010.

Ayag, Z. and Samanlioglu, F., "Analytic Network Process (ANP) for solar power plant location problem", IIE Annual Conference and Expo 2010 (IERC'10), June 5-9, Cancun, Mexico, 2010.

Ayag, Z. and Ozdemir, R.G., "Fuzzy ANP-based modified TOPSIS for concept selection problem", I. Int'l Fuzzy Systems Symposium (FUZZSS'09), TOBB University of Economics and Technology, October 1-2, Ankara, Turkey, 2009.

Ayag, Z., Buyukozkan, G. and Samanlioglu, F., "A fuzzy QFD approach to determine logistics requirements in food industry", VII. Int'l Logistics and Supply Chain Congress (LM-SCM'09), November 5-6, İstanbul, Turkey, 2009.

Ayag, Z. and Samanlioglu, F., "Concept selection in a NPD environment through AHP/ANP: A comparative study ", IIE Annual Conference and Expo 2009 (IERC'09), May 30-June 3, Miami, USA, 2009.

Samanlioglu, F. and Ayag, Z., "A cross-docking model with soft time windows ", IIE Annual Conference and Expo 2009 (IERC'09), May 30-June 3, Miami, USA, 2009.

Ayag, Z., Samanlioglu, F., Ozpamuk, T., Ertem, S. and Gumulcinelioglu, C., "Fuzzy analytic hierarchy process to evaluate solar power plant location alternatives", XXIX. Operation Research and Industrial Engineering National Congress (YA/EM`09), 22-24 June, Bilkent University, Ankara, Turkey, 2009.

Samanlioglu, F., Ayag, Z., Esen, E.E., Gunduz, A., Polat, M.O., Tavsanli, S. and Ozak, F., "Route improvement for a courier truck: A case study", XXIX. Operation Research and Industrial Engineering National Congress (YA/EM^09), 22-24 June, Bilkent University, Ankara, Turkey, 2009.

Buyukozkan, G., Ayag, Z., Caka, E., Ozgunduz, G. and Sahin, G.," Determining the supply chain strategies in food industry: A proposed model and its application", VIII. National Production Research Symposium (UAS'08), 24-25 October, organized by İstanbul University and İstanbul Kültür University, İstanbul, Turkey, 2008.

Ayag, Z. and Ozdemir, R.G., "The evaluation of ERP software through fuzzy replacement analysis and analytic network process ", XXVIII. Operation Research and Industrial Engineering National Congress (YA/EM`08), 30 June-2 July, Galatasaray University, İstanbul, Turkey, 2008.

Samanlioglu, F., Ayag, Z., Ercan, B.B. and Yetim, M., "Application of a biobjective ambulance location model ", XVIII. Operation Research and Industrial Engineering National Congress (YA/EM`08), June 30- July 2, Galatasaray University, İstanbul, Turkey, 2008.

Samanlioglu, F. and Ayag, Z., "OR/MS research in hazardous waste management ", XXVIII. Operation Research and Industrial Engineering National Congress (YA/EM`08), June 30- July 2, Galatasaray University, İstanbul, Turkey, 2008.

Ayag, Z., Samanlioglu, F., Turkmen, E., Ozturk, V. and Kotek, H., "Facility site location through analytic network process ", XXVIII. Operation Research and Industrial Engineering National Congress (YA/EM 08), June 30- July 2, Galatasaray University, İstanbul, Turkey, 2008.

Ayag, Z., Samanlioglu, F., Dalgic, M.Ş., Eksi, M. and Erol, Y.A., "A software development for product costing through activity-based costing ", XXVIII. Operation Research and Industrial Engineering National Congress (YA/EM`08), June 30-July 2, Galatasaray University, İstanbul, Turkey, 2008.

Ozdemir, R.G. and Ayag, Z., "Equipment selection in an assembly-line design through fuzzy replacement analysis and analytic network process", XV. Int'l Working Seminar on Production Economics (IWSPE'08), March 3-7, Innsbruck, Austria, 2008.

Danaci Sakalar, T. and Ayag, Z., "Technology road-mapping for effective new product development process", II. National System Engineering Congress, Yıldız University, February 6-8, İstanbul, Turkey, 2008.

Ozdemir, R.G. and Ayag, Z., "An integrated approach to assembly-line selection", IX. Int'l Symposium on Analytic Hierarchy Process (ISAHP'2007), August 3-6, Viña del Mar, Chile, 2007.

- Danacı, T. and Ayag, Z., "Technology management for effective new product development process", VI. Workshop on Industrial and Management Engineering, The Chamber of Mechanical Engineers in Turkey: Bursa Branch, November 9-10, Bursa, Turkey, 2007.
- Ayag, Z., Buyukozkan, G., Tufekcioglu, M., Gürel, S. and Ozdemir, S., "An ANP-based application for supplier selection in automotive industry ", XXVII. Operation Research and Industrial Engineering National Congress (YA/EM`07), 2-4 July, Dokuz Eylul University, Izmir, Turkey, 2007.
- Ayag, Z. and Ozdemir, R. G., "Enterprise resource planning (ERP) system investments and analysis", Dynamics 2007-Management of Investments and Project Risks, National Project Management Congress, 13-14 April, Kadir Has University, İstanbul, Turkey, 2007.
- Ozdemir, R. G., Ayag, Z., Kula, U. and Ince, O., "A case study in supply chain management using 0-1 integer goal programming", XXVI. Operation Research and Industrial Engineering National Congress (YA/EM`06), 3-5 July, Kocaeli University, İzmit, Turkey, 2006.
- Ayag, Z. and Ozdemir, R. G. and Yelken, B., An effective implementation of an enterprise resource planning (ERP) system with an assessment in a Turkish firm ", The 3rd Int'l Logistics and Supply Chain Congress, November 23-24, Galatasaray University, İstanbul, Turkey, 2005.
- Ince, O., Ayag, Z. and Ozdemir, R.G., "Simulation approach to minimizing total cost in the supply chain ", The 3rd Int'l Logistics and Supply Chain Congress, November 23-24, Galatasaray University, İstanbul, Turkey, 2005.
- Ince, O, Ayag, Z. and Ozdemir, R. G., "The determining of buffer size capacity in assembly lines) ", XXV. Operation Research and Industrial Engineering National Congress (YA/EM^{O5}), July 4-6, Koç University, İstanbul, Turkey, 2005.
- Gultas, I., Ozdemir, R. G. and Ayag, Z., "Using of investment analysis techniques for equipment selection in assembly lines under demand uncertainty ", XXV. Operation Research and Industrial Engineering National Congress (YA/EM 05), July 4-6, Koç University, İstanbul, Turkey, 2005.
- Ayag, Z., "An approach to evaluating machine tool alternatives using simulation and AHP", The 4th Int'l Symposium on Intelligent Manufacturing Systems (SAU'04), September 6-8, Sakarya University, Sakarya, TURKEY, 2005.
- Ayag, Z., Ozdemir, R. G. and Yılmaz, A., "A step-by-step model for implementing hardware infrastructure of ERP systems ", XXIV. Operation Research and Industrial Engineering National Congress (YA/EM`04), June 15-18, Cukurova University, Adana, Turkey, 2004.
- Ayag, Z., Ozdemir, R. G. and Uguz, H., "A decision support system for evaluating ERP packages ", XXIV. Operation Research and Industrial Engineering National Congress (YA/EM^04), June 15-18, Çukurova University, Adana, Turkey, 2004.
- Ayag, Z., Ozdemir, R. G. and Beser, M., "An approach for competitive advantage by improving integration between marketing and production", XXIV. Operation Research and Industrial Engineering National Congress (YA/EM`04), June 15-18, Çukurova University, Adana, Turkey, 2004.
- Ozdemir, R. G., Ayag, Z. and Dursunoğlu, M., "A simulation-based model for capacity improvement in manufacturing systems", XXIV. Operation Research

and Industrial Engineering National Congress (YA/EM^{O4}), June 15-18, Çukurova University, Adana, Turkey, 2004.

Ozdemir, R. G., Ayag, Z. and Çakır, D., "A line balancing method for set-up time reduction", XXIV. Operation Research and Industrial Engineering National Congress (YA/EM`04), June 15-18, Çukurova University, Adana, Turkey, 2004.

Ozdemir, R. G., Ayag, Z. and Ozturk, İ., "An economic error measure for demand forecasting", XXIV. Operation Research and Industrial Engineering National Congress (YA/EM 04), June 15-18, Çukurova University, Adana, Turkey, 2004.

Ayag, Z., Dincmen, M., Durmusoglu, M. B. and Ertay, T., "Expert simulation systems in production systems", Symposium of Computer Use and Automation in Industry, İ.T.Ü. in cooperation with Alumni of Berlin Technical University (TU Berlin) and KOSGEB, İstanbul, Turkey, 1991.

Erkut, H., Polat, S., Bozdag, C. E., Ceylan, C., Bayraktar, C. A. and Ayag, Z., "Investigation of inflation–productivity–interest relationships using system dynamics modeling ", Advances in Simulation' 92 Symposium, July 6-7, Boğazici University, İstanbul, Turkey, 1992.

Akhun, M., Ayag, Z. and Ertay, T., "Simulation of production systems based on expert systems", Advances in Simulation '92 Symposium, July 6-7, Bogazici University, İstanbul, TURKEY, 1992.

Ayag, Z. and Dincmen, M., "Expert systems in industry and an expert system design for quality control", XV. Operation Research and Industrial Engineering National Congress (YA/EM`1993), July 7-9, İstanbul, Turkey, 1993.

Technical Reports

"Innovation Capacity and Performance Evaluation Report", Ören Kablo Sistemleri Elektrik San. ve Tic. Ltd. Şti., InoSuit Program, Nov 2017, Istanbul, Turkey [in-Turkish]

"Innovation Capacity and Performance Evaluation Report", Boytaş Mobilya A.S. (currently-managed by TMSF), InoSuit Program, May 2018, Kayseri, Turkey [in-Turkish]

"Innovation Capacity and Performance Evaluation Report", Sönmez Transformatör San. ve Tic. A.S., InoSuit Program, May 2019, Kocaeli, Turkey [in-Turkish]

"Innovation Capacity and Performance Evaluation Report", Rella Gıda San. ve Tic. A.S., InoSuit Program, Dec 2021, Kocaeli, Turkey [in-Turkish]

"Innovation Capacity and Performance Evaluation Report", Ekin Endüstriyel San. ve Tic. A.S., InoSuit Program, Apr 2023, İstanbul, Turkey [in-Turkish]

"Innovation Capacity and Performance Evaluation Report", Bilgin Denizcilik San. ve Tic. A.S., InoSuit Program, Dec 2024, İstanbul, Turkey [in-Turkish]

Posters

Ayag, Z. and Samanlioglu, F., "Cross docking mathematical model, The Workshop on Women in Industrial Engineering Academia (WIEA'12), May 30-Jun 1, Kadir Has University, İstanbul, Turkey, 2012.

Invited Talks

"Introduction to facility layout planning", American University of Middle East (AUM), College of Engineering, Jan 10, Egaila, Kuwait, 2016.

"Concept evaluation in a new product development environment through multiple-criteria decision making methods: A review and new approaches", Kadir Has University, Faculty of Engineering and Natural Sciences, December 5, İstanbul, Turkey, 2014.

"Product design evaluation in a new product development environment", Mondragon University, Faculty of Engineering, Erasmus Teaching Staff Mobility (TSM) Program, May 2-7, Bilbao, Spain, 2014.

"Strategic management in the 21st Century", Vilnius Gediminas Technical University, Faculty of Business Management, Erasmus Teaching Staff Mobility (TSM) Program, April 15-19, Vilnius, Lithuania, 2013.

"Product design evaluation in a new product development environment", Copenhagen University, College of Engineering, Erasmus Teaching Staff Mobility (TSM) Program, May 8-11, Copenhagen, Denmark, 2012.

"Multiple-criteria decision making methods for concept selection in a NPD environment", Universidad de La Coruña, Escuela Universitaria Politécnica, Erasmus Teaching Staff Mobility (TSM) Program, April 5-9, Ferrol-A Coruña, Spain, 2010.

"A step-by-step implementation and analysis model of a computer integrated manufacturing (CIM) system-The overview of CAD/CAM systems: An application in a Turkish firm", İstanbul Technical University, İstanbul, Turkey, 1998.

"A step-by-step implementation and analysis model of a computer integrated manufacturing (CIM) system: An application in a Turkish firm", İstanbul Technical University, İstanbul, Turkey, 1997.

"A step-by-step implementation and analysis of a computer integrated manufacturing (CIM) system: An application", İstanbul Technical University, İstanbul, Turkey, 1997.

"Introduction to computer-aided process planning (CAPP)", İstanbul Technical University, İstanbul, Turkey, 1997.

Presentations

"Innovation in the world: How the South Korea has developed by innovation? India, China and Silicon Valley", Conference on Innovation and Competitive Advantage, April 2008, Kadir Has University, İstanbul, Turkey, 2008.

"A step-by-step implementation and analysis model of a computer integrated manufacturing (CIM) system", Ph.D. Seminar, Institute of Science and Technology, İstanbul Technical University, İstanbul, Turkey, 1998.

"The adaptation to the changing: the strategies for excellence", In-House Seminar, Makina Takım Endüstrisi A.Ş., İzmit, Turkey, 1997.

"The implementing of a computer-aided design (CAD) and documentation system", In-House Seminar, Makina Takım Endüstrisi A.Ş., İzmit, Turkey, 1997.

"The developing of a computer software to calculate the required gear group for tap manufacturing", In-House Seminar, Makina Takım Endüstrisi A.Ş., İzmit, Turkey, 1996.

Dissertation & Reports

Ayag, Z., A step-by-step implementation and analysis model for a computer integrated manufacturing (CIM) system, Ph.D. Dissertation, Industrial Engineering Department, Istanbul Technical University, 2003.

Ayag, Z., The simulation of a mold manufacturing facility using SIMAN, Master Thesis, Industrial Engineering Department, İstanbul Technical University, 1991.

Ayag, Z., A survey on simulation applications in production systems", Bachelor Thesis, Industrial Engineering Department, İstanbul Technical University, 1989.

Others

Lecture Notes: "Introduction to Enterprise Resources Planning (ERP) Systems", based on the class presentations, Spring 2004, *unpublished*.

Booklet: "The Workshop on Women in Industrial Engineering Academia 2012-(WIEA'12)", Kadir Has University, in collaboration with Auburn and Wichita State Universities, 2012.

RESEARCH AND INDUSTRIAL PROJECTS

Research Projects

IBM SUR Award: Urban Engineering Studies in İstanbul, the prestigious IBM Shared University Research (SUR) award, 137,000 \$, 2013-2015 (Project member).

Kadir Has University Scientific Research Project (KHAS-BAP): Development of an effective hazardous material (HAZMAT) management system for Marmara Region through a multiple-criteria decision making method (with Dr. F. Samanlioglu), 15,000 TL, 2009-2010 (Project member).

Eureka Project: An expert system design for quality control in household manufacturing, in collaboration with İstanbul Technical University, Arçelik A.Ş., TEE A.Ş. and Bruel Kayer Co. of Denmark (as a member for a year of 1993), 275,000 \$, 1993 (Project member).

TTGV Project: The design and manufacturing of thin-ceramic- and TIN-coated cutting tools, Makina Takım Endüstrisi A.Ş., 52,000 \$, 1996-1997 (Project member).

Projects in Industry

InoSuit (Innovation-Focused Mentorship Project) by Turkish Exporters Assembly (TIM) and Sabancı U. for an establishing an enterprise innovation system in companies (2017-2025.

Establishment of an effective project planning system for ship-making using Microsoft Project, Türkter A.Ş., Tuzla, Turkey, 2006.

The development of adjustable airbag system for 2003 Model FORD cars. In this system, the blown-up speed of airbag can be adjusted to the seating position of the occupant by using the sensor placed at the bottom of the seat, Magna International, Inc., Ontario, Canada, 2000.

The development of child seat to the occupant seat for more safety, Magna International, Inc., Ontario, Canada, 2000.

The automation of drawing checking operations in company's engineering department: Decreased the drawing checking time with eliminating paper waste in order to improve drawing lead times in the engineering department, Mold-Masters Ltd., Ontario, Canada, 1999.

As a reporter in TSE, prepared an national twist drill standard-TS 62 using the following ISO standards (ISO 5468: 92, ISO 235: 80, ISO 3292: 95, ISO 3291: 95, ISO 494: 75, ISO 5419: 82, ISO/DIS 10899: 75, ISO 10898: 92, ISO

3314: 75, ISO 3438: 75, ISO 3439: 75, ISO 4780, ISO 296), Ankara, Turkey, Makina Takım Endüstrisi A.Ş., Kocaeli, Turkey, 1996-1998.

Established "CAD system using I-DEAS Master Series" for cutting tool design, Makina Takım Endüstrisi A.Ş., Kocaeli, Turkey, 1995.

Developed an computer software using QBasic to calculate "the best gear configuration used in manufacturing of relief angle of taps with twist channels", Makina Takım Endüstrisi A.Ş., Kocaeli, Turkey, 1996.

TEACHING ACTIVITIES

Courses Taught

Piri Reis University (12)

Introduction to Industrial Engineering Innovation and Entrepreneurship Facility Design and Planning

Computer Integrated Manufacturing Systems and Automation

Enterprise Resource Planning
Innovation and Entrepreneurship
Inventory and Materials Management
Lean Manufacturing

Special Topics in Industrial Engineering Dissertation Project I (Undergraduate) Dissertation Project II (Undergraduate)

Thesis (Graduate)

Kadir Has University (22)

Design

Introduction to System Analysis

Manufacturing Processes

Operations Research I

Operations Research II

Multiple-Criteria Decision Making Factory Design and Plant Layout

Management Information Systems

Systems Simulation

Introduction to Manufacturing Processes

Computer Integrated Manufacturing

Production Planning and Control

Strategic Planning

Integrated Enterprise Systems

Final Project (Coordinator and Advisor)

Engineering Problem Solving and Project Management

Principles of Industrial Engineering Production Planning and Control

Innovation and Technology Management

Graduate Seminar (Coordinator)

Master's Thesis (Coordinator and Advisor)

Ph.D Thesis (Advisor)

İstanbul Kültür University (6)

Computer Integrated Manufacturing Enterprise Resource Planning Decision Support and Artificial Intelligence Quality Engineering

Final Project

Supply Chain Management

İstanbul Technical University (as T.A.) (13)

Computer Integrated Manufacturing
Computer Programming using BASIC
Computer Prog. using MS-COBOL
Data Processing in Industrial Systems
Facility Planning
Introduction to Industrial Engineering
Int. to Measurement and Machine Tools
Machine and Cutting Tools
Production Planning and Control
Quality Control
Statistics
System Simulation
Technical Drawing

Konkuk University (Seoul, South Korea) (1) Strategic Management in the 21st Century (Int'l Summer School'11)

Teaching Staff Mobility (TSP) & Others

Universidad de La Coruña, Escuela Universitaria Politécnica, Spain, 2010

International Summer School at Konkuk University, South Korea, 2011

Copenhagen University, College of Engineering, Department of Production Engineering, Denmark, 2012

Vilnius Gediminas Technical University, Faculty of Business Management, Lithuania, 2013

Mondragon University, Faculty of Engineering, Spain, 2014,

Ecole Superieure des Industries du Textile et Habillement (ESITH), Morocco, 2019.

University of Malaysia-Pahang (UMPSA), Malaysia, 2023.

West Pomerianian University of Szczecin, Poland, 2025.

Student Advising

Ph.D. Students (supervised)(1)

Bilal Oday Saeed-Kadir Has University (2022)

Ph.D. Students (committee member)(6)

Özge Tuğrul-İTÜ (also monitoring, 2016)

Sachin K. Patil-Sardar Vallabhbhai National Institute of Tech.(2014)

İlkay Gültaş (2013)

Ahmet S. Suntur-İTÜ (2012)

Murat Durucu-İTÜ (2012)

Murat Mala-Sakarya University (2010)

Ph.D. Qualification Exam (committee member)(4)

Tasbih Tuffafa (2019)

Bilal Oday Saeed Aldewachi (2020)

Fareed Al-Sayıd (2020) Burak Erkan Kaya (2020)

M.Sc. Students (supervised)(6)

Taha Berke Aytulga-Piri Reis University (on-going)

Mehmet Ö. Demirhan (2018)

Nazmiye Yağmur Aslan-Kadir Has University (2016)

Sinem Gürel-Kadir Has University (2013) Özlenen Şentürk-Kadir Has University (2013)

M.Sc. Students (committee member)(6)

Mohamad Najjar-İstanbul Kültür University (2021) Mohsin Hussain-İstanbul Kültür University (2021) Ziad Abu Ghanimeh-İstanbul Kültür University (2020) Ecem Taşdemir-Kadir Has University (2013) Hande Çakır-Kadir Has University (2013) Erkan Çaka- İTÜ (2012)

Others

Undergraduate Student Counselling Graduate Student Counselling

SERVICE ACTIVITIES

Editorial Activities	Journal of Fuzzy Logic and Modeling in Engineering (Editorial Board Member)	2021-P
	International Supply Chain Technology Journal	2020-P
	(Editorial Board Member) International Journal of R&D Innovation Strategy (Associate Editor)	2015-P
	Technology Audit and Production Reserves (Editorial Board Member)	2013-2016
	Int'IJournal of Economics, Commerce and Management (Editorial Board Member)	2013-2015
	The Scientific World Journal (Editorial Board Member)	2013-P
	Science Discovery	2012-P
	(Editorial Board Member) Int'l Journal of Fuzzy Systems and Advanced Applications	2010-2014
	(Associate Editor) International Journal of Supply Chain Management (Editorial Board Member)	2008-2016
	Int'l J. of Computer Science and Information Engineering (Editorial Board Member)	2008-2010
	International Journal of Production Research (SCI®) (Editorial Board Member)	2007-2010
	Asian Journal of Industrial Engineering	2007-2017
	(Associate Editor) Advances in Fuzzy Systems	2007-2009
	(Editorial Board Member) Modeling and Simulation in Engineering	2007-2014
	(Editorial Board Member) Asian Journal of Information Management	2007-2009
	(Technical Editor) Journal of Intelligent Manufacturing (SCI-E®) (Associate Editor) Asian Journal of Marketing	2007-2009
	(Technical Editor) Research Journal of Business Management (Technical Editor)	
Editorial Review Board Member	Asia Pacific Management Review Journal of Computers Engineering Letters	2005-P 2009-P 2010-P

Peer Review

MÜDEK (Assoc. for Evaluation & Accreditation of Engineering Programs, the full member of ENAEE, and Washington Cord of Int'l Eng. Alliance, IEA) Evaluator for Accreditation of Engineering Programs (2015-P)

TOBB Economy and Technology University (IE Department) (2022) Marmara University (Industrial Engineering Program (2017) Atılım University (Industrial Engineering Program (2016)

YÖK (Council of Higher Education in Turkey) Quality Council Evaluator/Team Leader for Institutional External Evaluation İzmir Kâtip Çelebi University, İzmir (2016-2017) (as Evaluator) Adnan Menderes University, Aydın (2017-2018) (as Team Leader)

Council of Inter-University in Turkey (ÜAK): Jury Membership for Associate Professorship (2017-P)

Reviewing

Journals

(Journals & Conferences)

International Journal of Production Economics

Advances in Fuzzy Systems

Asia Pacific Management Review

Asia-Pacific Journal of Operational Research Computers and Industrial Engineering European Journal of Industrial Engineering

International Journal of Approximate Reasoning

Information Sciences

International Journal of Design Engineering

International Journal of Production Research

Journal of Engineering Design

Journal of Intelligent Manufacturing

Endüstri Mühendisliği Dergisi

International Journal of Information Technology and Decision Making

Journal of Computers

Computers and Industrial Engineering

Annals of Operations Research

Journal of Engineering Design

Journal of the Faculty of Engineering and Architecture of Gazi University International Journal of Information Technology and Decision Making Journal of Sakarya University-Institute of Science and Engineering International Journal of Computer Integrated Manufacturing International Journal of Industrial and Systems Engineering

Expert Systems with Applications

Journal of Systems Science and Systems Engineering

Universidad Nacional de Colombia Revista Ingeniería Investigación

International Journal of Information Technology and Decision Making

International Journal of Fuzzy Systems

International Journal of Energy Applications and Technology

International Journal of Analytic Hierarchy Process

Journal of Intelligent and Fuzzy Systems

Conferences

The 42nd Operations Research and Ind. Eng. National Congress (YAEM'22) The Int'l Conf. on Information Man., Innovation Man., and Ind.Eng.(ICIII'21) The IEOM European Conf. on Ind.Eng.& Operations Management (IEOM'21) The 40th Operations Research and Ind.Eng. National Congress (YAEM'20) IEEE Int'l Conference on Fuzzy Systems (FUZZ-IEEE'20) The Int'l Conf. on Applied Man. Advances in the 21st Century (AMA21'20) The 10th Int'l Conf. on Industrial Eng. & Operations Management (IEOM'20) The 39th Operations Research and Ind. Eng. National Congress (YAEM'19) The 2nd IEOM European Conf. on Ind. Eng. & Operations Man. (IEOM'18) The 8th Int'l Conf. on Ind. Eng. & Operations Management (IEOM'18)

The 5th Int'l Conf. on Ind. Eng. and Operations Management (IEOM'15)
The Global Conference on Eng. and Technology Management (GCETM'14)
The 2nd Int'l Conf. on Comm., Computing & Control Applications (CCCA'12)
The 3rd Int'l Conf. on Ind. Eng. & Operations Management (IEOM'12)
The 9th International Logistics and Supply Chain Congress (LM-SCM'11)
The 2nd Int'l Conf. on Ind. Eng. & Operations Management (IEOM'11)
The Int'l Sym. on Innovations in Intelligent Syst. & Applications (INISTA'10)
IIE Annual Conference and Expo 2010 (IERC'10)
The IEEE International Symposium on Industrial Electronics (IEEE-ISIE'10)
The IIE Annual Conference and Expo 2009 (IERC'09)
The IEEE Int'l Conf. on Cybernetics & Intelligent Systems (CIS) and
Robotics, Automation and Mechatronics (RAM)(CIS-RAM)
The International Conference on Information Systems (ICIS)

(Others)

Evaluating Proposals for the Following Publishers

Taylor and Francis Group (New Journal) Hindawi Publishing Group (Special Issues) (many)

For Personal Evaluations for the Following Institutions

Sabancı University, Nisantası University, Kadir Has University, Piri Reis University

Program/Project Evaluations in Different Capacities

TÜBİTAK Projects as Panelist and Referee (many) (2009-P) Eurostars Programme: External Referee (2017-P) Kadir Has University-Projects as Internal Panelist (2018-2022)

For R&D Facility Evaluations

Martur Sünger ve Koltuk Tesisleri Ticaret A.Ş. (R&D center evaluation for the Ministry of Science, Industry and Technology, 2010)
Bosch Sanayi ve Ticaret A.Ş. (R&D center evaluation for the Ministry of Science, Industry and Technology, 2013)
Samet Kalıp ve Metal Sanayi A.Ş. (R&D center evaluation for the Ministry of Science, Industry and Technology, 2015)

Others

Council of Inter-University in Turkey (ÜAK): Expertise of Scientific Research and Business Ethics: Expert (2017; 2021)

Other Professional Activities

Roles in Conference Organizations at Different Capacities

Conference Chair

The 12th Int'l Conf. on Industrial Eng. and Operations Management (IEOM'22), Mar 8-10, 2022, Istanbul, TURKEY.

Co-Organizer

The Workshop on Women in Industrial Engineering Academia in 2012 (WIEA'12), Kadir Has University, May 30-Jun 1, 2012, Istanbul, TURKEY

The IEEE Int'l Conference on Fuzzy Systems (FUZZ-IEEE'15), Kadir Has University, Aug 2-5, 2015, Istanbul, TURKEY

Organizing Committee Membership

The Symposium on Computer Use and Automation in Industry, Istanbul Technical University, Nov 1990, Istanbul, TURKEY

The XIV. Operational Research & Ind. Eng. National Congress (YAEM`1991), İTÜ, Jun 1991, Istanbul, TURKEY

The Symposium on Computer Use and Automation in Industry, Istanbul Technical University, Nov 1991, Istanbul, TURKEY

The 3rd Int'l Conference and Exhibition on Ind. Eng., Istanbul Technical University, Nov 2-3, 2016, Istanbul, TURKEY

The Int'l Conf. on Civil and Structural Engineering, Jun 21-22, 2018, Paris, FRANCE

Steering Committee Membership

The VII. Istanbul Informatics Congress on Smart Cities, Kadir Has University, Nov 13-14, 2013, Istanbul, TURKEY

The VIII. Istanbul Informatics Congress on Smart Cities, Kadir Has University, Nov 26-27, 2014, Istanbul, TURKEY

The IX. Istanbul Informatics Congress on Smart Cities, Kadir Has University, Nov 18-19, 2015, Istanbul, TURKEY

Miscellaneous

The 6-Sigma and Its Applications Panel, Kadir Has University, Feb 2007, Istanbul, TURKEY (Moderator & Organization)

The Conference on Innovation and Competitive Advantage, Kadir Has University, Apr 2008, Istanbul, TURKEY (Moderator & Organization)

The VII. Istanbul Informatics Congress on Smart Cities, Kadir Has University (Panel on Business Continuity and Security in Public Sector), Nov 13-14, 2013, Istanbul, TURKEY

(Moderator)

Roles as Scientific, Steering, Advisory, Industry & Technical Committee Memberships

The XXVII. Operation Research & Ind. Eng. National Congress (YA/EM 07) The 2nd System Engineering National Congress

The XXVIII. Operation Research & Ind. Eng. National Congress (YA/EM`08),

The Series of Seminars on Optimization in Industrial Engineering

The XXIX. Operation Research & Ind. Eng. National Congress (YA/EM`09)

The XXX. Operation Research & Ind. Eng. National Congress (YA/EM`10)

The X. National Symposium on Production Research (UAS'10)

The 8th International Logistics and Supply Chain Congress (ILSCC'10)

The XXXI. Operation Research & Ind. Eng. National Congress (YA/EM`11)

The Ind. Eng. Software and Applications Congress and Exhibition (EMYK`11)

The 2nd Int'l Conf. on Ind. Eng. and Operations Management (IEOM'11)

The IX. International Logistics and Supply Chain Congress (ILSCC'11)

The 3rd Int'l Conf. on Ind. Eng. and Operations Management (IEOM'12)

The 10th Int'l Conf. on Uncertainty Modeling in Knowledge Eng. & Decision Making (FLINS'12)

The XXXII. Operation Research & Ind. Eng. National Congress (YA/EM`12)

The XXXIII. Operation Research & Ind. Eng. National Congress (YA/EM 13)

The International IIE Conference (IIE`13)

The 1st Int'l Conf. on Information, Operations Man. & Statistics (ICIOMS'13)

The 7th Istanbul Information Technology Congress (2013)

The Global Conf. on Engineering and Technology Management (GCETM'14)

The 4th Int'l Conf. on Ind. Eng. and Operations Management (IEOM'14)

The 1st International Sym. on Industrial Design Engineering (ISIDE'14)

The 15th International Conference on Fuzzy Systems (FS'14)

The XXXIV. Operation Research & Ind. Eng. National Congress (YA/EM 14)

The 8th Istanbul Information Technology Congress (2014)

The 2nd Int'l Conf. on Infor., Operations Man. and Statistics (ICIOMS'14)

The 5th Int'l Conf. on Ind. Eng. and Operations Management (IEOM'15)

The 2015 Int'l Conference on Neural Networks-Fuzzy Systems (NN-FS'14)

The IEEE International Conference on Fuzzy Systems (FUZZ-IEEE'15)

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The 2nd Global Conf. on Eng. & Technology Management (GCETM'15)
The 3rd International Conference on Industrial Engineering (ICIE'15)
The 57th National Convention of Indian Institution of Industrial Engineering
The 4th International Fuzzy Systems Symposium (FUZZYSS'15)
The 16th International Conference on Fuzzy Systems (FS'15)
The 9th Istanbul Information Technology Congress (2015)
The Global Joint Conference on Ind. Eng. & Its Application Areas (GJCIE'16)
The 2nd Int'l Conf. on Adv. & Rec. Inn. in Mech., Prod. & Ind. Eng. (ARIMPIE'16)
The 3rd Business and Management Conference (IISES'16)
The 17th International Conference on Fuzzy Systems (FS'16)
The 17th International Conference and Exhibition on Industrial Engineering
The 7th Int'l Conf. on Ind. Eng. and Operations Management (IEOM'17)
The 29th International Academic Conference (IISES'17)
The 2017 International Conference on Fuzzy Systems
The 1st International Conference on Business and Management (ICBM'17)
The 1st Int. Conf. on Education, Culture & Social Development (ICECSD'17)
The 1st European Conference on Fuzzy Systems (EECS-FUZZY'17)
The 5th International Fuzzy Systems Symposium (FUZZYSS'17)
The 4th International Conference on Industrial Engineering (ICIE'17)
The 1st World Sym. on Economics, Business and Management (WSEBM'17)
The 8th Int'l Conf. on Ind. Eng. and Operations Management (IEOM'18)
The Int'l Conf. for Smart Computing System and Application (ICSCSA'18)
The Int'l Conf. on Emerging Technologies for Comm. & Networks (ICETCN'18)
The 2nd IEOM European Conf. on Ind. Eng. and Operations Management
The 3rd IEOM North American Conf. on Ind. Eng. & Operations Management
The 2nd European Conference on Fuzzy Systems (EECS-FUZZY 2018)
The 2nd International Conference on Business and Management (ICBM'19)
The 3rd Int'l Conf. on Education, Culture & Social Development (ICECSD'19)
The 3rd EU Int'l Conf. on Ind. Engineering and Operations Management
The 4th IEOM North American Conf. on Ind. Eng. & Operations Management
The 6th Int'l Man. Information Syst. Conf.: Connectedness & Cybersecurity
The International Workshop on Fuzzy Systems (IWFS'19)
The 3rd Int'l Conf. on Modern Research in Sci., Engineering and Technology
The 10th IEOM European Conf. on Ind. Eng. & Operations Management
The Int'l Conf. on Computer Science, Engineering and Education (CSEE'20)
The Int'l Conf. on Applied Man. Advances in the 21st Century (AMA21'20)
The 2nd IEOM South American Conf. on Ind.Eng. & Operations Management
The International Workshop on Fuzzy Systems (IWFS'20)
The 2nd Int'l Conf. on Advan. Research in Applied Sci. & Eng. (ICARASE'20)
The 3rd Int'l Conf. on Applied Research in Eng., Sci. & Tech. (ICAREST'20)
The 3rd Int'l Conference on Research on Applied Science (ICRAS'19)
The 2nd Int'l Academic Conf. on Research in Engineering and Technology
The 3rd Int'l Conf. on Research in Science, Engineering and Technology
The 3rd Int'l Conf. on Innovative Research in Sci., Eng. and Technology
The 2nd Int'l Conference on Research in Engineering and Technology
The IEEE International Conference on Fuzzy Systems (FUZZ-IEEE'20)
The 2nd International Workshop on Fuzzy Systems (IWFS'20)
The 2nd Int'l Sym.on Neural Networks, Fuzzy Syst., Evolutionary Computing
The 5th Int'l Conf. on Applied Research in Sci., Technology and Knowledge
The 2nd Int'l Conference on Computer Science, Eng. & Education (CSEE'21)
The 40th Operations Research & Ind. Eng. National Congress (YAEM'21)
The 3rd Int'l Conf. on Advanced Research in Applied Sci. & Engineering
The 4th Int'l Conf. on Modern Research in Science, Eng. & Technology
The 4th Int'l Conference on Research on Applied Science (ICRAS'21)
The 2nd Int'l Academic Conference on Research in Eng. and Technology
The 4th Int'l Conf. on Research in Science, Engineering and Technology
The 4th Int'l Conf. on Innovative Research in Science, Eng. and Technology
The 3rd Int'l Conf. on Research in Engineering and Technology
The Int'l Conf. on Information & Innovation Man. & Ind. Engineering (ICIII'21)
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Session Chaired

XXIV. Operational Research & Ind. Eng. National Congress (YA/EM'04) The 4th Int'l Symposium on Intelligent Manufacturing Systems (IMS'04)

XXVII. Operational Research & Ind. Eng. National Congress (YA/EM'07). XXVIII. Operational Research & Ind. Eng. National Congress (YA/EM'08). XXIX. Operational Research & Ind. Eng. National Congress (YA/EM'09). XXX. Operational Research & Ind. Eng. National Congress (YA/EM'10). The 16th Int'l Working Seminar on Production Economics for the Sessions of Innovation Management and Simulation Applications (IWSPE'10). The 2nd Int'l Conf. on Ind. Eng. and Operations Management (IEOM'11). XXXI. Operational Research & Ind. Eng. National Congress (YA/EM'11). The 3rd Int'l Fuzzy Systems Symposium (FUZZYSS'13) The 9th International Management Conference (IMC'15) The 5th International Fuzzy Systems Symposium (FUZZYSS'17)

Track Chaired

The 3rd Int'l Conf. on Ind. Eng. and Operations Management (IEOM'12) The 3rd Int'l Conf. on Ind. Eng. and Operations Management (IEOM'14) The 8th Int'l Conf. on Ind. Eng. and Operations Management (IEOM'18) The 10th Int'l Conf. on Ind. Eng. and Operations Management (IEOM'20)

Contribution to Media

Introduction of the industrial engineering department at Kadir Has University, introductory video for *YouTube*, 2014-2017.

Effective project and risk management for a successful enterprise resource planning (ERP) implementation", article, *MakinaTEK*, May 2007 (with Tuğba Danacı).

One of the outstanding professions: industrial engineering, article, *Kadir Has Bulletin*, April-May, pp. 35-37, 2010.

A new century, changing world and industrial engineering, article, *Panorama Khas*, No.3, pp. 27-29, 2011.

Many presention videos through social media on the programs in the Graduate School of Science and Engineering. Many short informative articles publised on my interest fields on the social media.