

# EYÜP ERTUĞRUL KARSAK

## PROF.

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International Researcher IDs

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### Learning Knowledge

Doctorate 1991 - 1994	Istanbul Technical University, İşletme Fakültesi, Endüstri Mühendisliği Bölümü, Turkey
Postgraduate 1989 - 1990	University of Southern California, School of Engineering, Industrial and Systems Engineering, United States Of America
Undergraduate 1985 - 1989	Istanbul Technical University, İşletme Fakültesi, Endüstri Mühendisliği Bölümü, Turkey

### Foreign Languages

English, C1 Advanced

French, C1 Advanced

### Academic Titles / Tasks

Professor 2001 - Continues	Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği
Associate Professor 1996 - 2001	Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği
Lecturer PhD 1996 - 1997	Universite de Paris-Dauphine, Institut Finance, Ceramade
Assistant Professor 1994 - 1996	Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği
Research Assistant 1990 - 1991	University of Southern California, Graduate School Of Business, Decision Systems

### Supported Projects

1. KARSAK E. E., GÖKER MUTLU N., Project Supported by Higher Education Institutions, İNSANİ GELİŞMENİN ÇOK BOYUTLU DEĞERLENDİRİLMESİ İÇİN ORTAK AĞIRLIKLIL VZA TEMELLİ YAKLAŞIM, 2017 - 2019
2. KARSAK E. E., Project Supported by Higher Education Institutions, İSTANBUL'DAKİ İLÇELERİN SAĞLIK HİZMETLERİNİN ETKİNLİĞİNİN KÜMELEME VE SIRALAMA ANALİZİ İLE DEĞERLENDİRİLMESİ, 2017 - 2018
3. KARSAK E. E., GÖKER MUTLU N., Project Supported by Higher Education Institutions, PERFORMANS DEĞERLENDİRİLMESİNDE ORTAK AĞIRLIKLIL VERİ ZARFLAMA ANALİZİ TEMELLİ ÇOK ÖLÇÜTLÜ KARAR VERME YAKLAŞIMI, 2015 - 2017
4. KARSAK E. E., Project Supported by Higher Education Institutions, KALİTE FONKSİYONU YAYILIMI VE BULANIK AĞIRLIKLANDIRILMIŞ ORTALAMA TABANLI GRUP KARAR VERME YAKLAŞIMININ UYGULAMALARI, 2015 - 2017
5. KARSAK E. E., Project Supported by Higher Education Institutions, İSTANBUL'DA SAĞLIK SEKTÖRÜ PERFORMANS DEĞERLENDİRİLMESİNDE BULANIK KARAR VERME YAKLAŞIMI, 2014 - 2015
6. KARSAK E. E., Project Supported by Higher Education Institutions, ENERJİ ALTERNATİFLERİNİN DEĞERLENDİRİLMESİ VE SEÇİMİNDE KARAR ANALİZİ YAKLAŞIMI, 2013 - 2014
7. KARSAK E. E., Project Supported by Higher Education Institutions, KALİTE FONKSİYONU YAYILIMI VE VERİ ZARFLAMA ANALİZİ TABANLI BÜTÜNLEŞİK KARAR VERME YAKLAŞIMIYLA TEDARİKÇİLERİN DEĞERLENDİRİLMESİ VE SEÇİMİ, 2012 - 2014
8. KARSAK E. E., Project Supported by Higher Education Institutions, TEDARİKÇİ SEÇİMİ İÇİN ÇOK ÖLÇÜTLÜ KARAR VERME YAKLAŞIMLARI, 2010 - 2012
9. KARSAK E. E., Project Supported by Higher Education Institutions, İLERİ İMALAT SİSTEMİ SEÇİMİ İÇİN BÜTÜNLEŞİK REEL OPSİYON VE ÇOK ÖLÇÜTLÜ KARAR VERME YAKLAŞIMI, 2010 - 2011
10. KARSAK E. E., Project Supported by Higher Education Institutions, TIBBİ ATIK BERTARAF ALTERNATİFLERİNİN ÇOK ÖLÇÜTLÜ KARAR VERME YAKLAŞIMIYLA DEĞERLENDİRİLMESİ, 2009 - 2011
11. KARSAK E. E., Project Supported by Higher Education Institutions, İLERİ İMALAT TEKNOLOJİSİ SEÇİMİ İÇİN BULANIK REGRESYON VE BULANIK ÇOK AMAÇLI PROGRAMLAMA TABANLI KARAR VERME YAKLAŞIMI, 2008 - 2009

#### Published journal articles indexed by SCI, SSCI, and AHCI

1. **Circular economy performance assessment of countries using a common-weight DEA-based approach**  
KARSAK E. E., UÇAR KELEŞ E.  
Environment, Development and Sustainability, 2024 (SCI-Expanded)
2. **Evaluating Educational Performance of OECD Countries with Common-Weight DEA-Based Models**  
Ucar E., KARSAK E. E.  
Journal of the Knowledge Economy, 2023 (SSCI)
3. **An Integrated QFD and Common Weight DEA-Based Fuzzy MCDM Framework for Performance Ranking of Countries**  
GÖKER MUTLU N., KARSAK E. E., DURSUN M.  
SOCIAL INDICATORS RESEARCH, vol.159, no.1, pp.409-430, 2022 (SSCI)
4. **Two-stage common weight DEA-Based approach for performance evaluation with imprecise data**  
GÖKER MUTLU N., KARSAK E. E.  
SOCIO-ECONOMIC PLANNING SCIENCES, vol.74, 2021 (SCI-Expanded)
5. **IMPROVED COMMON WEIGHT DEA-BASED DECISION APPROACH FOR ECONOMIC AND FINANCIAL PERFORMANCE ASSESSMENT**  
Karsak E. E., Göker N.  
TECHNOLOGICAL AND ECONOMIC DEVELOPMENT OF ECONOMY, vol.26, pp.430-448, 2020 (SSCI)
6. **Imprecise DEA framework for evaluating health-care performance of districts**  
KARSAK E. E., Karadayi M. A.  
KYBERNETES, vol.46, no.4, pp.706-727, 2017 (SCI-Expanded)
7. **Taxonomy and review of non-deterministic analytical methods for supplier selection**

KARSAK E. E., DURSUN M.

INTERNATIONAL JOURNAL OF COMPUTER INTEGRATED MANUFACTURING, vol.29, no.3, pp.263-286, 2016 (SCI-Expanded)

8. **An integrated fuzzy MCDM approach for supplier evaluation and selection**  
KARSAK E. E., DURSUN M.  
COMPUTERS & INDUSTRIAL ENGINEERING, vol.82, pp.82-93, 2015 (SCI-Expanded)
9. **An integrated supplier selection methodology incorporating QFD and DEA with imprecise data**  
KARSAK E. E., DURSUN M.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.41, no.16, pp.6995-7004, 2014 (SCI-Expanded)
10. **A QFD-based fuzzy MCDM approach for supplier selection**  
DURSUN M., KARSAK E. E.  
APPLIED MATHEMATICAL MODELLING, vol.37, no.8, pp.5864-5875, 2013 (SCI-Expanded)
11. **A decision model for setting target levels in software quality function deployment to respond to rapidly changing customer needs**  
ŞENER Z., KARSAK E. E.  
CONCURRENT ENGINEERING-RESEARCH AND APPLICATIONS, vol.20, no.1, pp.19-29, 2012 (SCI-Expanded)
12. **Robot selection using a fuzzy regression-based decision-making approach**  
KARSAK E. E., ŞENER Z., DURSUN M.  
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, vol.50, no.23, pp.6826-6834, 2012 (SCI-Expanded)
13. **Assessment of health-care waste treatment alternatives using fuzzy multi-criteria decision making approaches**  
DURSUN M., KARSAK E. E., Karadayi M. A.  
RESOURCES CONSERVATION AND RECYCLING, vol.57, pp.98-107, 2011 (SCI-Expanded)
14. **A fuzzy multi-criteria group decision making framework for evaluating health-care waste disposal alternatives**  
DURSUN M., KARSAK E. E., Karadayi M. A.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.38, no.9, pp.11453-11462, 2011 (SCI-Expanded)
15. **An integrated decision framework for evaluating and selecting e-learning products**  
ALPTEKİN S. E., KARSAK E. E.  
APPLIED SOFT COMPUTING, vol.11, no.3, pp.2990-2998, 2011 (SCI-Expanded)
16. **A combined fuzzy linear regression and fuzzy multiple objective programming approach for setting target levels in quality function deployment**  
ŞENER Z., KARSAK E. E.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.38, no.4, pp.3015-3022, 2011 (SCI-Expanded)
17. **A fuzzy regression and optimization approach for setting target levels in software quality function deployment**  
ŞENER Z., KARSAK E. E.  
SOFTWARE QUALITY JOURNAL, vol.18, no.3, pp.323-339, 2010 (SCI-Expanded)
18. **A fuzzy MCDM approach for personnel selection**  
DURSUN M., KARSAK E. E.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.37, no.6, pp.4324-4330, 2010 (SCI-Expanded)
19. **A decision model for setting target levels in quality function deployment using nonlinear programming-based fuzzy regression and optimization**  
ŞENER Z., KARSAK E. E.  
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.48, pp.1173-1184, 2010 (SCI-Expanded)
20. **A real options approach for evaluation and justification of a hospital information system**  
Ozogul C. O., KARSAK E. E., Tolga E.  
JOURNAL OF SYSTEMS AND SOFTWARE, vol.82, no.12, pp.2091-2102, 2009 (SCI-Expanded)
21. **An integrated decision making approach for ERP system selection**  
KARSAK E. E., Ozogul C. O.

EXPERT SYSTEMS WITH APPLICATIONS, vol.36, no.1, pp.660-667, 2009 (SCI-Expanded)

22. **Using data envelopment analysis for evaluating flexible manufacturing systems in the presence of imprecise data**  
Karsak E. E.  
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.35, pp.867-874, 2008 (SCI-Expanded)
23. **Improved common weight MCDM model for technology selection**  
KARSAK E. E., Ahiska S. S.  
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, vol.46, no.24, pp.6933-6944, 2008 (SCI-Expanded)
24. **Robot selection using an integrated approach based on quality function deployment and fuzzy regression**  
Karsak E. E.  
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, vol.46, no.3, pp.723-738, 2008 (SCI-Expanded)
25. **A generalized fuzzy optimization framework for R&D project selection using real options valuation**  
Karsak E.  
COMPUTATIONAL SCIENCE AND ITS APPLICATIONS - ICCSA 2006, PT 3, vol.3982, pp.918-927, 2006 (SCI-Expanded)
26. **Valuation of expansion flexibility in flexible manufacturing system investments using sequential exchange options**  
Karsak E., Ozogul C.  
INTERNATIONAL JOURNAL OF SYSTEMS SCIENCE, vol.36, no.5, pp.243-253, 2005 (SCI-Expanded)
27. **Practical common weight multi-criteria decision-making approach with an improved discriminating power for technology selection**  
Karsak E., Ahiska S.  
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, vol.43, no.8, pp.1537-1554, 2005 (SCI-Expanded)
28. **Choquet integral-based decision making approach for robot selection**  
Karsak E.  
KNOWLEDGE-BASED INTELLIGENT INFORMATION AND ENGINEERING SYSTEMS, PT 2, PROCEEDINGS, vol.3682, pp.635-641, 2005 (SCI-Expanded)
29. **Fuzzy multi-criteria decision making approach for transport projects evaluation in Istanbul**  
Karsak E., Ahiska S.  
COMPUTATIONAL SCIENCE AND ITS APPLICATIONS - ICCSA 2005, VOL 4, PROCEEDINGS, vol.3483, pp.301-311, 2005 (SCI-Expanded)
30. **Fuzzy multiple objective programming framework to prioritize design requirements in quality function deployment**  
Karsak E.  
COMPUTERS & INDUSTRIAL ENGINEERING, vol.47, pp.149-163, 2004 (SCI-Expanded)
31. **Fuzzy multiple objective decision making approach to prioritize design requirements in quality function deployment**  
Karsak E.  
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, vol.42, no.18, pp.3957-3974, 2004 (SCI-Expanded)
32. **Product planning in quality function deployment using a combined analytic network process and goal programming approach**  
Karsak E., Sozer S., Alptekin S.  
COMPUTERS & INDUSTRIAL ENGINEERING, vol.44, no.1, pp.171-190, 2003 (SCI-Expanded)
33. **A fuzzy multiple objective programming approach for the selection of a flexible manufacturing system**  
Karsak E., Kuzgunkaya O.  
INTERNATIONAL JOURNAL OF PRODUCTION ECONOMICS, vol.79, no.2, pp.101-111, 2002 (SCI-Expanded)
34. **Distance-based fuzzy MCDM approach for evaluating flexible manufacturing system alternatives**  
Karsak E.

- INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, vol.40, no.13, pp.3167-3181, 2002 (SCI-Expanded)
35. **Fuzzy multi-criteria decision-making procedure for evaluating advanced manufacturing system investments**  
Karsak E., Tolga E.  
INTERNATIONAL JOURNAL OF PRODUCTION ECONOMICS, vol.69, no.1, pp.49-64, 2001 (SCI-Expanded)
36. **Personnel selection using a fuzzy MCDM approach based on ideal and anti-ideal solutions**  
Karsak E.  
MULTIPLE CRITERIA DECISION MAKING IN THE NEW MILLENNIUM, vol.507, pp.393-402, 2001 (SSCI)
37. **A two-phase robot selection procedure**  
Karsak E.  
PRODUCTION PLANNING & CONTROL, vol.9, no.7, pp.675-684, 1998 (SCI-Expanded)
38. **An overhaul-replacement model for equipment subject to technological change in an inflation-prone economy**  
Karsak E., Tolga E.  
INTERNATIONAL JOURNAL OF PRODUCTION ECONOMICS, pp.291-301, 1998 (SCI-Expanded)

### Articles Published in Other Journals

1. **An options approach to valuing expansion flexibility in flexible manufacturing system investments**  
KARSAK E. E., Özogul C. O.  
Engineering Economist, vol.47, no.2, pp.169-193, 2002 (Scopus)
2. **Measures of liquidity risk supplementing fuzzy discounted cash flow analysis**  
KARSAK E. E.  
Engineering Economist, vol.43, no.4, pp.331-344, 1998 (Scopus)

### Refereed Congress / Symposium Publications in Proceedings

1. **Earthquake Vulnerability Evaluation of Istanbul's Districts Using DEABased Models**  
Gudelek M., KARSAK E. E.  
10th World Congress on New Technologies, NewTech 2024, Barcelona, Spain, 25 - 27 August 2024
2. **Circular Economy Performance Assessment of EU Countries Using Network DEA**  
KARSAK E. E., UÇAR KELEŞ E.  
International Academic Conference Management, Economics, Business and Marketing, Viyana, Austria, 8 - 09 December 2023
3. **Performance assessment of Turkish banks using a common-weight network DEA approach with weight restrictions**  
UÇAR KELEŞ E., KARSAK E. E.  
INTERNATIONAL CONFERENCE ON DATA ENVELOPMENT ANALYSIS, England, 4 - 06 September 2023
4. **An Integrated Decision Approach for Evaluation of Education Policy in EU Countries**  
KARSAK E. E., UÇAR KELEŞ E.  
International Academic Conference Management, Economics and Marketing, Viyana, Austria, 7 - 08 July 2023
5. **Personnel Selection Using ARAS Method with Objective Weights**  
KARSAK E. E., UÇAR KELEŞ E.  
IAC 2022 in Vienna, Viyana, Austria, 05 August 2022
6. **Educational Performance Assessment of OECD Countries Using PISA 2018 Data**  
UÇAR E., KARSAK E. E.  
International Academic Conference Teaching, Learning and E-learning, Viyana, Austria, 2 - 03 July 2021
7. **Clustering and ranking analysis with imprecise data for evaluating healthcare performance of districts in Istanbul**

Karadayi M. A., KARSAK E. E.

21st World Multi-Conference on Systemics, Cybernetics and Informatics, WMSCI 2017, Florida, United States Of America, 8 - 11 July 2017, vol.2, pp.163-168

8. **An improved common weight DEA-based methodology for manufacturing technology selection**

Goker N., KARSAK E. E.

2016 World Congress on Engineering and Computer Science, WCECS 2016, California, United States Of America, 19 - 21 October 2016, vol.2226, pp.864-869

9. **A Fuzzy Decision Model for Strategic Evaluation of Medical Suppliers**

DURSUN M., KARSAK E. E.

World Congress on Engineering and Computer Science, San-Francisco, Costa Rica, 21 - 23 October 2015, pp.919-924

10. **Fuzzy MCDM approach for health-care performance assessment in Istanbul**

Karadayi M. A., KARSAK E. E.

18th World Multi-Conference on Systemics, Cybernetics and Informatics, WMSCI 2014, Florida, United States Of America, 15 - 18 July 2014, vol.2, pp.228-233

11. **Supplier Selection Using Data Envelopment Analysis in the Presence of Imprecise Data**

KARSAK E. E., DURSUN M., Ozogul C. O.

15th World Multi-Conference on Systematics, Cybernetics and Informatics (WMSCI 2011), Florida, United States Of America, 19 - 22 July 2011, pp.253-258

12. **A generalized fuzzy optimization framework for R&D project selection using real options valuation**

KARSAK E. E.

ICCSA 2006: International Conference on Computational Science and Its Applications, Glasgow, England, 8 - 11 May 2006, vol.3982 LNCS, pp.918-927

13. **Fuzzy multi-criteria decision making approach for transport projects evaluation in istanbul**

KARSAK E. E., Sebnem Ahiska S.

International Conference on Computational Science and Its Applications - ICCSA 2005, Singapore, 9 - 12 May 2005, vol.3483, pp.301-311

14. **Choquet integral-based decision making approach for robot selection**

KARSAK E. E.

9th International Conference on Knowledge-Based Intelligent Information and Engineering Systems, KES 2005, Melbourne, Australia, 14 - 16 September 2005, vol.3682 LNAI, pp.635-641

15. **Fuzzy multiple objective programming approach for personnel selection**

KARSAK E. E.

2000 IEEE International Conference on Systems, Man and Cybernetics, Nashville, TN, USA, 8 - 11 October 2000, vol.3, pp.2007-2012

16. **DEA-based robot selection procedure incorporating fuzzy criteria values**

KARSAK E. E.

1999 IEEE International Conference on Systems, Man, and Cybernetics 'Human Communication and Cybernetics', Tokyo, Japan, 12 - 15 October 1999, vol.1

## Academic and Administrative Experience

2015 - 2023	<b>Rector</b>	Galatasaray University, Rektörlük
2014 - 2015	<b>Head of Department</b>	Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği
2008 - 2015	<b>Vice Rector</b>	Galatasaray Üniversitesi, Rektörlük
2008 - 2014	<b>Dean</b>	Galatasaray Üniversitesi, Mühendislik ve Teknoloji Fakültesi

1994 - 2009	<b>Head of Department</b>	Galatasaray Üniversitesi, Mühendislik ve Teknoloji Fakültesi, Endüstri Mühendisliği Bölümü
1997 - 2008	<b>Director of The Institution</b>	Galatasaray Üniversitesi, Fen Bilimleri Enstitüsü
1995 - 2000	<b>Vice Dean</b>	Galatasaray Üniversitesi, Mühendislik ve Teknoloji Fakültesi

## Courses

Managerial Finance, Postgraduate, 2022 - 2023  
 Advanced Engineering Economy, Postgraduate, 2022 - 2023  
 Mathematical Modelling and Optimization, Postgraduate, 2022 - 2023  
 Operations Research I, Undergraduate, 2022 - 2023

## Advising Theses

Karsak E. E., Measuring efficiency in education using PISA 2018 data, Postgraduate, E.UÇAR(Student), 2021  
 Karsak E. E., NOVEL APPROACHES IN DEA-BASED MULTI-CRITERIA DECISION MAKING AND THEIR APPLICATIONS, Doctorate, N.GÖKER(Student), 2021  
 KARSAK E. E., Using multi-criteria decision making approaches for evaluating health care performance of districts in Istanbul, Doctorate, M.ALMULA(Student), 2017  
 KARSAK E. E., Multi-criteria decision making approaches for supplier selection, Doctorate, M.DURSUN(Student), 2013  
 KARSAK E. E., Decision making approaches for software quality function deployment, Doctorate, Z.ŞENER(Student), 2010  
 KARSAK E. E., Evaluating health-care waste disposal alternatives for istanbul using fuzzy multi-criteria decision making approaches, Postgraduate, M.ALMULA(Student), 2009  
 KARSAK E. E., L'application des methodes de prise de decision a multicriteres au probleme de selection de personnel, Postgraduate, İ.ÖZGÜR(Student), 2007  
 KARSAK E. E., Evaluating solid waste management scenarios using fuzzy multi-criteria decision making approaches, Postgraduate, M.DURSUN(Student), 2007  
 KARSAK E. E., Application de deploiement de la fonction qualite a l'industrie des appareils electromenagers, Postgraduate, B.ÖZBAYRAKTAR(Student), 2005  
 KARSAK E. E., Une approche floue d'analyse d'enveloppement des données au problème de sélection de fournisseur, Postgraduate, M.HAKAN(Student), 2005  
 KARSAK E. E., Les applications de régression floue et d'optimisation floue aux problemes de sélection de la technologie, Postgraduate, Z.YILMAZ(Student), 2005  
 KARSAK E. E., Une nouvelle procédure de décision multi-objectif floue pour la sélection de système d'informatique, Postgraduate, Y.BOĞAÇ(Student), 2004  
 KARSAK E. E., Approches alternatives de la logique floue pour l'application du deploiement, Postgraduate, P.KAYMAZ(Student), 2003  
 KARSAK E. E., Les applications de l'analyse d'enveloppement de donnees imprecises, Postgraduate, S.ŞEBNEM(Student), 2003  
 KARSAK E. E., Selection de machine de textile a l'aide des methodes a la decision multi-critere, Postgraduate, G.KURŞUN(Student), 2003  
 KARSAK E. E., Application de la mesure floue et de l'integral floue en aide multicritere a la decision, Postgraduate, S.SÖZER(Student), 2001  
 KARSAK E. E., Les approches analytiques appliques en deploiement de fonction de qualite, Postgraduate, S.EMRE(Student), 2001  
 KARSAK E. E., La selection d'un systeme de production flexible (SPF) par la programmation lineaire booleenne floue,

Postgraduate, O.KUZGUNKAYA(Student), 2000

KARSAK E. E., Evaluation de la performance relative socio economique des pays en voie de developpement,

Postgraduate, T.ÖZYİĞİT(Student), 2000

KARSAK E. E., L'approche de l'option reelle pour evaluer la flexibilite d'expansion d'un atelier flexible, Postgraduate,

C.OKAN(Student), 2000

KARSAK E. E., La Gestion des stocks dans un environnement de demande aleatorie, Postgraduate,

C.KALYONCUOĞLU(Student), 1999

## Metrics

Publication: 67

Citation (WoS): 2254

Citation (Scopus): 2850

H-Index (WoS): 24

H-Index (Scopus): 25

## Research Areas

Industrial Engineering, Decision Theory, Multi Criteria Decision Making

## Non Academic Experience

Yapı ve Kredi Bankası