

# Prof. EYÜP ERTUĞRUL KARSAK

## Personal Information

**Email:** ekarsak@gsu.edu.tr

**Web:** <https://avesis.gsu.edu.tr/ekarsak>

## Education Information

Doctorate, İstanbul Teknik Üniversitesi, İşletme Fakültesi, Endüstri Mühendisliği Bölümü, Turkey 1991 - 1994

Undergraduate, İstanbul Teknik Üniversitesi, İşletme Fakültesi, Endüstri Mühendisliği Bölümü, Turkey 1985 - 1989

## Foreign Languages

English, C1 Advanced

## Research Areas

Engineering and Technology

## Academic Titles / Tasks

Professor, Galatasaray Üniversitesi, Mühendislik ve Teknoloji Fakültesi, Endüstri Mühendisliği Bölümü, 2001 - Continues  
Associate Professor, Galatasaray Üniversitesi, Mühendislik ve Teknoloji Fakültesi, Endüstri Mühendisliği Bölümü, 1996 - 2001

Lecturer PhD, Universite De Paris-Dauphine, Institut Finance, Ceramade, 1996 - 1997

Assistant Professor, Galatasaray Üniversitesi, Mühendislik ve Teknoloji Fakültesi, Endüstri Mühendisliği Bölümü, 1994 - 1996

Research Assistant, University Of Southern California, Graduate School Of Business, Decision Systems, 1990 - 1991

## Academic and Administrative Experience

Galatasaray Üniversitesi, Rektörlük, 2015 - Continues

Galatasaray Üniversitesi, Mühendislik ve Teknoloji Fakültesi, Endüstri Mühendisliği Bölümü, 2014 - Continues

Galatasaray Üniversitesi, Rektörlük, 2008 - 2015

Galatasaray Üniversitesi, Mühendislik ve Teknoloji Fakültesi, 2008 - 2014

Galatasaray Üniversitesi, Mühendislik ve Teknoloji Fakültesi, Endüstri Mühendisliği Bölümü, 1994 - 2009

Galatasaray Üniversitesi, Fen Bilimleri Enstitüsü, 1997 - 2008

Galatasaray Üniversitesi, Mühendislik ve Teknoloji Fakültesi, 1995 - 2000

## Advising Theses

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. , Selection de machine de textile a l'aide des methodes a la decision multi-critere, Postgraduate, G.KURŞUN(Student), 2003

KARSAK E. E. , Les applications de l'analyse d'enveloppement de donnees imprecises, Postgraduate, S.ŞEBNEM(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

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **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, 2021 (Journal Indexed in SSCI)
- II. **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 (Journal Indexed in SCI)
- III. **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 (Journal Indexed in SSCI)

- IV. **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 (Journal Indexed in SCI)
- V. **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  
(Journal Indexed in SCI)
- VI. **An integrated fuzzy MCDM approach for supplier evaluation and selection**  
KARSAK E. E. , DURSUN M.  
COMPUTERS & INDUSTRIAL ENGINEERING, vol.82, pp.82-93, 2015 (Journal Indexed in SCI)
- VII. **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 (Journal Indexed in SCI)
- VIII. **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 (Journal Indexed in SCI)
- IX. **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 (Journal Indexed in SCI)
- X. **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 (Journal Indexed in SCI)
- XI. **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 (Journal Indexed in SCI)
- XII. **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 (Journal Indexed in SCI)
- XIII. **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 (Journal Indexed in SCI)
- XIV. **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 (Journal Indexed in SCI)
- XV. **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 (Journal Indexed in SCI)
- XVI. **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 (Journal Indexed in SCI)
- XVII. **A fuzzy MCDM approach for personnel selection**  
DURSUN M., KARSAK E. E.

- EXPERT SYSTEMS WITH APPLICATIONS, vol.37, no.6, pp.4324-4330, 2010 (Journal Indexed in SCI)
- XVIII. **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 (Journal Indexed in SCI)
- XIX. **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 (Journal Indexed in SCI)
- XX. **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 (Journal Indexed in SCI)
- XXI. **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 (Journal Indexed in SCI)
- XXII. **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 (Journal Indexed in SCI)
- XXIII. **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 (Journal Indexed in SCI)
- XXIV. **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 (Journal Indexed in SCI)
- XXV. **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 (Journal Indexed in SCI)
- XXVI. **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 (Journal Indexed in SCI)
- XXVII. **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 (Journal Indexed in SCI)
- XXVIII. **Fuzzy multiple objective programming framework to prioritize design requirements in quality function deployment**  
Karsak E.  
COMPUTERS & INDUSTRIAL ENGINEERING, vol.47, pp.149-163, 2004 (Journal Indexed in SCI)
- XXIX. **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 (Journal Indexed in SCI)
- XXX. **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 (Journal Indexed in SCI)

- XXXI. **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 (Journal Indexed in SCI)
- XXXII. **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 (Journal Indexed in SCI)
- XXXIII. **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 (Journal Indexed in SCI)
- XXXIV. **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 (Journal Indexed in SSCI)
- XXXV. **A two-phase robot selection procedure**  
Karsak E.  
PRODUCTION PLANNING & CONTROL, vol.9, no.7, pp.675-684, 1998 (Journal Indexed in SCI)
- XXXVI. **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 (Journal Indexed in SCI)

### **Refereed Congress / Symposium Publications in Proceedings**

- I. **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
- II. **Fuzzy Decision Approach Based on QFD and FWA for Selection of Medical Suppliers**  
DURSUN M., KARSAK E. E.  
World Congress on Engineering (WCE 2015), London, Canada, 1 - 03 July 2015, pp.802-807
- III. **An Integrated QFD-DEA Framework with Imprecise Data for Supplier Selection**  
KARSAK E. E. , DURSUN M.  
World Congress on Engineering (WCE 2013), London, Canada, 3 - 05 July 2013, pp.426-431
- IV. **Supplier Selection Using an Integrated Decision Making Approach Based on QFD and 2-Tuple Fuzzy Representation**  
DURSUN M., KARSAK E. E.  
World Congress on Engineering and Computer Science, San-Francisco, Costa Rica, 24 - 26 October 2012, pp.1309-1315
- V. **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
- VI. **A Decision Making Approach Based on Fuzzy Regression and Fuzzy Multiple Objective Programming for Advanced Manufacturing Technology Selection**

ŞENER Z., KARSAK E. E.

International Conference on Industrial Engineering and Engineering Management, Singapore, Singapore, 8 - 11 December 2008, pp.964-968

**VII. Decision model for advanced manufacturing technology selection using fuzzy regression and fuzzy optimization**

ŞENER Z., KARSAK E. E.

IEEE International Conference on Systems, Man and Cybernetics, Montreal, Canada, 7 - 10 October 2007, pp.2400-2404

**VIII. A common-weight MCDM framework for decision problems with multiple inputs and outputs**

KARSAK E. E. , Ahiska S. S.

International Conference on Computational Science and Its Applications (ICCSA 2007), Kuala-Lumpur, Malaysia, 26 - 29 August 2007, vol.4705, pp.779-781

**IX. A fuzzy multiple objective programming approach for personnel selection**

Karsak E.

IEEE International Conference on Systems, Man and Cybernetics, Tennessee, United States Of America, 8 - 11 October 2000, pp.2007-2012

**X. Fuzzy MCDM procedure for evaluating flexible manufacturing system alternatives**

Karsak E.

Conference on Leading Technology Change - Management Issues and Challenges, New-Mexico, United States Of America, 13 - 15 August 2000, pp.93-98

## Supported Projects

KARSAK E. E. , Project Supported by Higher Education Institutions, İNSANİ GELİŞMENİN ÇOK BOYUTLU DEĞERLENDİRİLMESİ İÇİN ORTAK AĞIRLIKLIL VZA TEMELLİ YAKLAŞIM, 2017 - 2019

KARSAK E. E. , Project Supported by Higher Education Institutions, İSTANBUL'DAKİ İLÇELERİN SAĞLIK HİZMETLERİNİN ETKİNLİĞİNİN KÜMELEME VE SIRALAMA ANALİZİ İLE DEĞERLENDİRİLMESİ, 2017 - 2018

KARSAK E. E. , Project Supported by Higher Education Institutions, PERFORMANS DEĞERLENDİRMESİNDE ORTAK AĞIRLIKLIL VERİ ZARFLAMA ANALİZİ TEMELLİ ÇOK ÖLÇÜTLÜ KARAR VERME YAKLAŞIMI, 2015 - 2017

KARSAK E. E. , Project Supported by Higher Education Institutions, KALİTE FONKSİYONU YAYILIMI VE BULANIK AĞIRLIKLILANDIRILMIŞ ORTALAMA TABANLI GRUP KARAR VERME YAKLAŞIMININ UYGULAMALARI, 2015 - 2017

KARSAK E. E. , Project Supported by Higher Education Institutions, İSTANBUL'DA SAĞLIK SEKTÖRÜ PERFORMANS DEĞERLENDİRMESİNDE BULANIK KARAR VERME YAKLAŞIMI, 2014 - 2015

KARSAK E. E. , Project Supported by Higher Education Institutions, ENERJİ ALTERNATİFLERİNİN DEĞERLENDİRİLMESİ VE SEÇİMİNDE KARAR ANALİZİ YAKLAŞIMI, 2013 - 2014

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

KARSAK E. E. , Project Supported by Higher Education Institutions, TEDARİKÇİ SEÇİMİ İÇİN ÇOK ÖLÇÜTLÜ KARAR VERME YAKLAŞIMLARI, 2010 - 2012

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

KARSAK E. E. , Project Supported by Higher Education Institutions, TIBBİ ATIK BERTARAF ALTERNATİFLERİNİN ÇOK ÖLÇÜTLÜ KARAR VERME YAKLAŞIMIYLA DEĞERLENDİRİLMESİ, 2009 - 2011

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

## Citations

Total Citations (WOS):1844

h-index (WOS):23