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Personal Information

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Education Information

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Industrial Engineering, Turkey 2004 - 2009

Postgraduate, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği Bölümü, Turkey 1999 - 2003

Undergraduate, Selcuk University, Faculty Of Engineering, Department Of Civil Engineering, Turkey 1994 - 1999

Dissertations

Doctorate, Araştırma geliştirme projelerinin değerlendirilmesine bulanık gerçek opsiyon yaklaşımı, Istanbul Technical University, Fen Bilimleri Enstitüsü, Industrial Engineering, 2009

Postgraduate, La selection des inducteurs de cout dans la methode ABC avec la methode Zionst-Wallenius et programmation de but, Galatasaray University, Fen Bilimleri Enstitüsü, 2003

Academic Titles / Tasks

Professor, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği, 2020 - Continues

Associate Professor, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği, 2014 - 2020

Assistant Professor, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği, 2009 - 2014

Lecturer, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği, 2007 - 2009

Research Assistant, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği, 2000 - 2007

Academic and Administrative Experience

Fakülte Yönetim Kurulu Üyesi, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, 2016 - 2020

Deputy Head of Department, Galatasaray University, Mühendislik ve Teknoloji Fakültesi, Endüstri Mühendisliği, 2011 - 2013

Courses

Üretim Yöntemleri ve Malzeme Bilimi, Undergraduate, 2019 - 2020

Çağdaş Yönetim Kavramları, Postgraduate, 2019 - 2020

Yatırım Analizi ve Portföy Teorisi, Postgraduate, 2019 - 2020

Mikro Ekonomi, Undergraduate, 2019 - 2020

Oyun Teorisi ve Uygulamaları, Postgraduate, 2019 - 2020

Advising Theses

- Tolga A. Ç. , EVALUATION OF SMART AND VERTICAL SYSTEMS IN URBAN FARMING VIA FUZZY MCDM METHODS, Postgraduate, M.BAŞAR(Student), 2021
- Tolga A. Ç. , Process bot automation selection with MCDM in airline cargo sector, Postgraduate, G.Durak(Student), 2020
- Tolga A. Ç. , Blockchain applications in maritime industry, Postgraduate, M.Kaşka(Student), 2020
- Tolga A. Ç. , Portfolio Optimization with Systemic Risk and Liquidity Risk Factors, Doctorate, F.ALALI(Student), 2019
- TOLGA A. Ç. , Effective power trading management in Turkish electricity market: Hedging with options, Postgraduate, K.ÖZHAN(Student), 2018
- TOLGA A. Ç. , Sustainable and renewable energy power plants evaluation by fuzzy VIKOR and fuzzy TODIM techniques, Postgraduate, Z.KEZBAN(Student), 2017
- TOLGA A. Ç. , A multi-stage new product development using Type-2 fuzzy numbers in a real option valuation, Postgraduate, N.SEMERCİOĞLU(Student), 2015
- TOLGA A. Ç. , The investment scenario analysis of supplementary machines with real options method by using Monte Carlo simulation, Postgraduate, B.KAYSERİLİOĞLU(Student), 2013
- TOLGA A. Ç. , Fuzzy multi attribute valuation of software projects via fuzzy real options in banking industry using Balanced Scorecard, Postgraduate, Ö.AFACAN(Student), 2012

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **The assessment of a smart system in hydroponic vertical farming via fuzzy MCDM methods**
TOLGA A. Ç. , Basar M.
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.42, no.1, pp.1-12, 2022 (Peer-Reviewed Journal)
- II. **Real options valuation of an IoT based healthcare device with interval Type-2 fuzzy numbers**
Tolga A. Ç.
SOCIO-ECONOMIC PLANNING SCIENCES, vol.69, 2020 (Peer-Reviewed Journal)
- III. **Finite-interval-valued Type-2 Gaussian fuzzy numbers applied to fuzzy TODIM in a healthcare problem**
Tolga A. Ç. , Parlak İ. B. , Castillo O.
ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE, vol.87, 2020 (Peer-Reviewed Journal)
- IV. **Hydroponic system evaluation in urban farming via fuzzy EDAS and TODIM methods**
TOLGA A. Ç. , Basar M.
Journal of Intelligent and Fuzzy Systems, vol.39, no.5, pp.6325-6337, 2020 (Peer-Reviewed Journal)
- V. **Portfolio allocation with the TODIM method**
Alali F., Tolga A. Ç.
EXPERT SYSTEMS WITH APPLICATIONS, vol.124, pp.341-348, 2019 (Peer-Reviewed Journal)
- VI. **Evaluation of Knowledge Management Tools by Using An Interval Type-2 Fuzzy TOPSIS Method**
Büyükozkan Feyzioğlu G., Parlak İ. B. , Tolga A. Ç.
INTERNATIONAL JOURNAL OF COMPUTATIONAL INTELLIGENCE SYSTEMS, vol.9, pp.812-826, 2016 (Peer-Reviewed Journal)
- VII. **A FUZZY MULTI-CRITERIA DECISION ANALYSIS APPROACH FOR RETAIL LOCATION SELECTION**
TOLGA A. Ç. , Tuysuz F., Kahraman C.
INTERNATIONAL JOURNAL OF INFORMATION TECHNOLOGY & DECISION MAKING, vol.12, no.4, pp.729-755, 2013 (Peer-Reviewed Journal)
- VIII. **A Real Options Approach For Software Development Projects Using Fuzzy Electre**
Tolga A. C.
JOURNAL OF MULTIPLE-VALUED LOGIC AND SOFT COMPUTING, vol.18, pp.541-560, 2012 (Peer-Reviewed Journal)
- IX. **A Comparative Fuzzy Real Options Valuation Model using Trinomial Lattice and Black-Scholes Approaches: A Call Center Application**

TOLGA A. Ç. , Kahraman C., DEMİRCAN M. L.

JOURNAL OF MULTIPLE-VALUED LOGIC AND SOFT COMPUTING, vol.16, pp.135-154, 2010 (Peer-Reviewed Journal)

- X. **An Alternative Ranking Approach and Its Usage in Multi-Criteria Decision-Making**
Kahraman C., TOLGA A. Ç.
INTERNATIONAL JOURNAL OF COMPUTATIONAL INTELLIGENCE SYSTEMS, vol.2, no.3, pp.219-235, 2009 (Peer-Reviewed Journal)
- XI. **Fuzzy Multiattribute Evaluation of R&D Projects Using a Real Options Valuation Model**
TOLGA A. Ç. , Kahraman C.
INTERNATIONAL JOURNAL OF INTELLIGENT SYSTEMS, vol.23, no.11, pp.1153-1176, 2008 (Peer-Reviewed Journal)
- XII. **Fuzzy multicriteria R&D project selection with a real options valuation model**
Tolga A. C.
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.19, pp.359-371, 2008 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Vertical Farming: Under Climate Change Effect**
NASKALÍ A. T. , PINARER Ö., TOLGA A. Ç.
in: Environment and Climate-smart Food Production, Charis M. Galanakis, Editor, Springer, pp.259-284, 2022
- II. **Fuzzy MCDM Methods in Sustainable and Renewable Energy Alternative Selection: Fuzzy VIKOR and Fuzzy TODIM**
Turgut Z. K. , Tolga A. Ç.
in: Energy Management—Collective and Computational Intelligence with Theory and Applications, Kahraman Cengiz,Kayakutlu Gülgün, Editor, Springer-Verlag , Berlin, pp.277-314, 2018
- III. **Health Informatics**
Parlak İ. B. , Tolga A. Ç.
in: Operations Research Applications in Healthcare Management, Kahraman Cengiz,Topçu,Y. İlker, Editor, Springer-Verlag , Berlin, pp.423-460, 2018
- IV. **Fuzzy Probability Theory I: Discrete Case**
Parlak İ. B. , Tolga A. Ç.
in: Fuzzy Statistical Decision Making Theory and Applications, Kahraman,C.,Kabak,Ö., Editor, Springer-Verlag , Berlin, pp.13-34, 2016
- V. **Fuzzy Probability Theory II: Continuous Case**
Tolga A. Ç. , Parlak İ. B.
in: Fuzzy Statistical Decision Making Theory and Applications, Kahraman,C.,Kabak,Ö., Editor, Springer-Verlag , Berlin, pp.35-54, 2016
- VI. **Fuzzy Investment Planning and Analyses in Production Systems**
Kahraman C., Tolga A. Ç.
in: PRODUCTION ENGINEERING AND MANAGEMENT UNDER FUZZINESS, Kahraman C,Yavuz M, Editor, Springer-Verlag , Berlin, pp.279-298, 2010

Refereed Congress / Symposium Publications in Proceedings

- I. **Smart System Evaluation in Vertical Farming via Fuzzy WEDBA Method**
Başar M., TOLGA A. Ç.
Smart System Evaluation in Vertical Farming via Fuzzy WEDBA Method, 21 - 23 July 2020
- II. **Process Robot Automation Selection with MADM in Airline Cargo Sector**
Durak G., TOLGA A. Ç.

International Conference on Intelligent and Fuzzy Systems, 21 - 23 July 2020

- III. **Blockchain Software Selection for a Maritime Organization with MCDM Method**
Kaşka M., TOLGA A. Ç.
International Conference on Intelligent and Fuzzy Systems, 21 - 23 July 2020
- IV. **Evaluating innovation projects in air cargo sector with fuzzy COPRAS**
TOLGA A. Ç. , Durak G.
Advances in Intelligent Systems and Computing, 23 - 25 July 2019, vol.1029, pp.702
- V. **Evaluation of hydroponic system in vertical farming via fuzzy EDAS method**
TOLGA A. Ç. , Gamsız B., Başar M.
Advances in Intelligent Systems and Computing, 23 - 25 July 2019, vol.1029, pp.745
- VI. **Effective Trading in Turkish Electricity Market: Hedging with Options**
Ocakoglu K., Tolga A. Ç.
World Congress on Engineering 2018 International Conference on Financial Engineering, London, United Kingdom, 4 - 06 July 2018, pp.314-318
- VII. **Sustainable and Renewable Energy Power Plants Evaluation by Fuzzy VIKOR Technique**
Turgut Z. K. , TOLGA A. Ç.
International MultiConference of Engineers and Computer Scientists, 15 - 17 March 2017
- VIII. **New Product Development Process Valuation usingCompound Options with Type-2 Fuzzy Numbers**
TOLGA A. Ç.
International MultiConference of Engineers and Computer Scientists, 15 - 17 March 2017
- IX. **Covariance Based Selection of Risk and Return Factors for Portfolio Optimization**
Alali F., TOLGA A. Ç.
The 2016 International Conference of Financial Engineering, Londrina, Brazil, 29 June - 01 July 2016
- X. **A Multi-Stage New Product Development using Fuzzy Type-2 sets in a Real Option Valuation**
Semercioglu N., TOLGA A. Ç.
IEEE International Conference on Fuzzy Systems (FUZZ-IEEE), İstanbul, Turkey, 2 - 05 August 2015
- XI. **EMPLOYING AN INTERVAL TYPE-2 FUZZY TOPSIS METHOD FOR KNOWLEDGE MANAGEMENT TOOL EVALUATION**
BÜYÜKÖZKAN FEYZİOĞLU G., PARLAK İ. B. , TOLGA A. Ç.
11th International Conference on Fuzzy Logic and Intelligent Technologies in Nuclear Science (FLINS), Joao Pessoa, Brazil, 17 - 20 August 2014, vol.9, pp.55-61
- XII. **EVALUATION OF MEDICAL DEVICES USING FUZZY TOPSIS WITH TYPE-2 FUZZY NUMBERS**
PARLAK İ. B. , Tolga A. C.
11th International Conference on Fuzzy Logic and Intelligent Technologies in Nuclear Science (FLINS), Joao Pessoa, Brazil, 17 - 20 August 2014, vol.9, pp.48-54
- XIII. **Tip 2 bulanık sayılar ile TOPSIS kullanarak medikal görüntüleme sistemlerinin seçimi**
PARLAK İ. B. , TOLGA A. Ç.
Yöneyem Araştırması ve Endüstri Mühendisliği 34. Ulusal Kongresi (YA/EM 14), Turkey, 25 - 27 June 2014
- XIV. **The Investment Scenario Analysis with Real Options Method by Using Monte Carlo Simulation**
Kayserilioğlu B., TOLGA A. Ç.
International Multi-Conference of Engineers and Computer Scientists (IMECS), Hong Kong, 13 - 15 March 2013
- XV. **FUZZY MULTI ATTRIBUTE VALUATION OF SOFTWARE PROJECTS IN BANKING VIA FUZZY REAL OPTIONS USING BALANCED SCORECARD**
Afacan O., TOLGA A. Ç.
10th International Conference on Fuzzy Logic and Intelligent Technologies in Nuclear Science (FLINS), İstanbul, Turkey, 26 - 29 August 2012, vol.7, pp.225-230
- XVI. **Fuzzy Multi-criteria Method for Revaluation of ERP System Choices Using Real Options**
TOLGA A. Ç.
World Congress on Engineering (WCE 2011), London, Canada, 6 - 08 July 2011, pp.1074-1075
- XVII. **Service Location Selection After Natural Disasters Using a Possibilistic Approach**
TÜYSÜZ F., TOLGA A. Ç.

- International Conference on Risk Analysis and Crisis Response (RACR2011), 22 - 25 May 2011
- XVIII. **A NEW FUZZY ELECTRE APPROACH WITH AN ALTERNATIVE FUZZY RANKING METHOD**
TOLGA A. Ç. , Kahraman C.
9th International FLINS Conference on Computational Intelligence: Foundations and Applications, Emei, PEOPLES R CHINA, 2 - 04 August 2010, vol.4, pp.432-433
- XIX. **Fuzzy Real Option Value Integrated Fuzzy ANP Method for Location Selection Problems**
TOLGA A. Ç. , Tuysuz F., Kahraman C.
2010 IEEE World Congress on Computational Intelligence, Barcelona, Spain, 18 - 23 July 2010
- XX. **Alternatif Bulanık Sayı Sıralama İçeren ELECTRE Yöntemi ile Araştırma Geliştirme Projelerinin Seçimi**
TOLGA A. Ç. , KAHRAMAN C.
Yöneylem Araştırması ve Endüstri Mühendisliği 30. Ulusal Kongresi (YA/EM 10), Turkey, 30 June - 02 July 2010, pp.385
- XXI. **Konum Seçim Problemleri için Bulanık Gerçek Opsiyonlarla Çok Ölçütlü Karar Verme Yaklaşımı**
TOLGA A. Ç. , KAHRAMAN C.
Yöneylem Araştırması ve Endüstri Mühendisliği 30. Ulusal Kongresi (YA/EM 10), Turkey, 30 June - 02 July 2010, pp.397
- XXII. **Fuzzy Multiattribute R&D Project Selection Using Real Options with Trinomial Lattice Approach**
TOLGA A. Ç. , Kahraman C.
2nd International Conference on Risk Analysis and Crisis Response, Beijing, China, 19 - 21 October 2009, pp.162-164
- XXIII. **Fuzzy Multi-Criteria Evaluation of R&D Projects and A Fuzzy Trinomial Lattice Approach for Real Options**
TOLGA A. Ç. , Kahraman C.
3rd International Conference on Intelligent System and Knowledge Engineering, Xiamen, China, 17 - 19 November 2008, pp.418-420
- XXIV. **A new fuzzy real options valuation model: Its application to multicriteria R&D project selection**
TOLGA A. Ç. , Kahraman C.
8th International Conference on Fuzzy Logic and Intelligent Technologies in Nuclear Science, Madrid, Spain, 21 - 24 September 2008, vol.1, pp.641-646
- XXV. **Yazılım Geliştirme Projelerinin Gerçek Opsiyon Değerleme Modeliyle Çok Ölçütlü Bulanık Değerlemesi**
TOLGA A. Ç. , KAHRAMAN C.
Yöneylem Araştırması ve Endüstri Mühendisliği 28. Ulusal Kongresi (YA/EM 08), Turkey, 30 June - 02 July 2008, pp.76

Supported Projects

- TOLGA A. Ç. , Project Supported by Higher Education Institutions, TÜRK ELEKTRİK PİYASASINDA ETKİN GÜÇ TİCARETİ YÖNETİMİ OPTİMİZASYONU, 2018 - 2019
- TOLGA A. Ç. , Project Supported by Higher Education Institutions, BULANIK ÇOK ÖLÇÜTLÜ KARAR VERME YÖNTEMLERİYLE SÜRDÜRÜLEBİLİR VE YENİLENEBİLİR ENERJİ SANTRAL ALTERNATİFLERİNİN DEĞERLENDİRİLMESİ, 2017 - 2018
- TOLGA A. Ç. , Project Supported by Higher Education Institutions, PORTFÖY OPTİMİZASYONUNDA RİSK FAKTÖRLERİNİN KOVARYANSA BAĞLI OLARAK SEÇİMİ, 2016 - 2017
- TOLGA A. Ç. , Project Supported by Higher Education Institutions, ÇOK AŞAMALI YENİ ÜRÜN GELİŞTİRMEDE TİP-2 BULANIK KÜMELER İÇEREN GERÇEK OPSİYON DEĞERLEME KULLANIMI, 2015 - 2017
- Tolga A. Ç. , Parlak İ. B. , Project Supported by Higher Education Institutions, Tip-2 bulanık sayı içeren çok ölçütlü karar verme yöntemleriyle sağlık donanımı seçimi, 2014 - 2015
- TOLGA A. Ç. , Project Supported by Higher Education Institutions, BANKA BİLİŞİM PROJELERİNİN STRATEJİK

HEDEFLERE UYGUN OLARAK GERÇEK OPSİYONLAR BÜTÜNLEŞİK ÇOK ÖLÇÜTLÜ KARAR VERME YÖNTEMİYLE SEÇİMİ, 2012 - 2013
TOLGA A. Ç. , Project Supported by Higher Education Institutions, ERP SİSTEM SEÇENEKLERİNİN GERÇEK OPSİYONLAR KULLANARAK BULANIK ÇOK ÖLÇÜTLÜ YÖNTEMLERLE YENİDEN DEĞERLEMESİ, 2011 - 2012
TOLGA A. Ç. , Project Supported by Higher Education Institutions, DOĞAL AFETLER SONRASI HİZMET BİRİMLERİNİN KONUMLARININ OLABİLİRLİK YAKLAŞIMIYLA SEÇİMİ, 2011 - 2012
TOLGA A. Ç. , Project Supported by Higher Education Institutions, BULANIK ÇOK ÖLÇÜTLÜ KARAR VERME VE GERÇEK OPSİYON MODELLERİYLE KONUM SEÇİMİ, 2010 - 2011
TOLGA A. Ç. , Project Supported by Higher Education Institutions, ÇOK ÖLÇÜTLÜ KARAR VERME YÖNTEMLERİYLE PROJE SEÇİMİ, 2010 - 2011

Tasks In Event Organizations

Kahraman C., Tolga A. Ç. , Çevik Onar S., Çebi S., Uçal Sarı İ., Öztayşi B., International Conference on Intelligent and Fuzzy Systems: Digital Acceleration and The New Normal, Scientific Congress, İzmir, Turkey, Temmuz 2022
Kahraman C., Tolga A. Ç. , Çevik Onar S., Çebi S., Öztayşi B., Uçal Sarı İ., The International Conference on Intelligent and Fuzzy Systems 2021 (Emerging Conditions and Digital Transformation), Scientific Congress, İstanbul, Turkey, Ağustos 2021
Kahraman C., Tolga A. Ç. , Çevik Onar S., Çebi S., Öztayşi B., Uçal Sarı İ., The International Conference on Intelligent and Fuzzy Systems 2020 (Intelligent and Fuzzy Techniques: Smart and Innovative Solutions), Scientific Congress, İstanbul, Turkey, Temmuz 2020
Kahraman C., Tolga A. Ç. , Çebi S., Çevik Onar S., Öztayşi B., Uçal Sarı İ., The International Conference on Intelligent and Fuzzy Systems 2019 (Big Data Analytics and Decision Making), Scientific Congress, İstanbul, Turkey, Temmuz 2019

Metrics

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