

# Prof. CEM İYİGÜN

## Personal Information

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## International Researcher IDs

ScholarID: U4ldcBcAAAAJ

ORCID: 0000-0002-2845-224X

Publons / Web Of Science ResearcherID: ABA-2129-2020

ScopusID: 24366685600

Yoksis Researcher ID: 163542

## Education Information

Doctorate, Rutgers, The State University of New Jersey, Rutgers Center For Operations Research, United States Of America 1999 - 2007

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Industrial Engineering, Turkey 1995 - 1999

## Foreign Languages

English, C1 Advanced

## Dissertations

Doctorate, Probabilistic Distance Clustering , Rutgers, The State University Of New Jersey, Rutgers Center For Operations Research, 2007

## Research Areas

Industrial Engineering

## Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Industrial Engineering, 2021 - Continues

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Industrial Engineering, 2015 - 2020

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Industrial Engineering, 2009 - 2015

Research Assistant, Rutgers, The State University of New Jersey, New Brunswick Campus, Graduate School , Rutgers Center For Operations Research, 1999 - 2002

## Academic and Administrative Experience

Head of Department, Middle East Technical University, Graduate School of Natural and Applied Sciences, Data and Decision Sciences, 2022 - Continues

Fakülte Kurulu Üyesi, Middle East Technical University, Faculty of Engineering, Department of Industrial Engineering, 2021 - Continues

Program Koordinatörü, Middle East Technical University, Graduate School of Natural and Applied Sciences, Engineering Management, 2020 - Continues

Head of Department, Middle East Technical University, Graduate School of Natural and Applied Sciences, Operational Research, 2017 - 2020

Deputy Head of Department, Middle East Technical University, Faculty of Engineering, Department of Industrial Engineering, 2017 - 2020

## Courses

Systems and Organization, Postgraduate, 2019 - 2020

## Advising Theses

İYİGÜN C., Kernel probabilistic distance clustering algorithms, Postgraduate, D.ÖZKAN(Student), 2022

İYİGÜN C., Reward shaping for efficient exploration and acceleration of learning in reinforcement learning, Postgraduate, M.İLAYDA(Student), 2022

İYİGÜN C., A memetic algorithm for clustering with cluster based feature selection, Postgraduate, İ.ALPER(Student), 2022

İyigün C., Süral H., An evolutionary algorithm to the two-echelon location routing problems with hard time windows, Postgraduate, M.MÜSLİM(Student), 2021

İyigün C., K-median clustering algorithms for time series data, Postgraduate, G.YİĞİT(Student), 2021

İyigün C., Two-Mode Probabilistic Distance Clustering, Postgraduate, Y.CANER(Student), 2021

Tural M. K., İyigün C., Dimension reduction for tree-structured data, Postgraduate, E.DURAK(Student), 2021

İyigün C., Süral H., Location-routing and synchronization problems in city logistics, Doctorate, M.SALEH(Student), 2020

İyigün C., Durahim A. O., SPAM DETECTION BY USING NETWORK AND TEXT EMBEDDING APPROACHES, Postgraduate, C.MERVE(Student), 2019

İyigün C., Mixed integer programming and heuristics approaches for clustering with cluster-based feature selection, Postgraduate, S.ÖNEN(Student), 2019

İYİGÜN C., ÖZDEMİREL N. E., Optimization Approaches for Classification and Feature Selection Using Overlapping Hyperboxes, Doctorate, D.AKBULUT(Student), 2019

Süral H., İyigün C., Open-loop reverse logistics network design of waste of electric and electronic equipment by consideration of hazardous materials, Postgraduate, T.MOHAMMADI(Student), 2019

İYİGÜN C., A Unified Approach for Center-Based Clustering Problems on Networks, Postgraduate, D.İPEK(Student), 2019

ÖZDEMİREL N. E., İYİGÜN C., Neighborhood construction-based multi-objective evolutionary clustering algorithm with feature selection, Postgraduate, C.ALAKUŞ(Student), 2018

İYİGÜN C., Feature weighting problem in K-nearest neighbor classifier, Postgraduate, N.GÜLEÇ(Student), 2017

İYİGÜN C., BAYINDIR Z. P., A Genetic algorithm for healthcare facility location problem, Postgraduate, M.İŞBİLİR(Student), 2016

İYİGÜN C., A statistical approach to job matching problem via difference metrics and data mining, Doctorate, A.FATİH(Student), 2016

İYİGÜN C., Time series classification using deep learning Time series classification using deep learning, Postgraduate, P.Umut(Student), 2016

İYİGÜN C., Time series classification using deep learning, Postgraduate, P.UMUT(Student), 2016

İYİGÜN C., DURAN S., The valuation of government guarantees provided for municipalities, Postgraduate,

M.ESAT(Student), 2015  
İYİGÜN C., Investigation of the impacts of linkage disequilibrium on SNP selection studies, Postgraduate, E.KANTAR(Student), 2015  
İYİGÜN C., BAYINDIR Z. P., Locating ems vehicles in general networks with an approximate queueing model and a metaheuristic solution approach, Postgraduate, M.ALTAN(Student), 2015  
İYİGÜN C., SÜRAL H., City logistics system design under cost uncertainty, Postgraduate, U.CAN(Student), 2015  
İYİGÜN C., Early warning on stock market bubbles via ellipsoidal clustering and inverse problems, Doctorate, E.KÜRÜM(Student), 2014  
İYİGÜN C., A two stage stochastic and risk averse approach to inventory positioning in floricultural auction network, Postgraduate, G.SEZEN(Student), 2014  
İYİGÜN C., BATMAZ İ., Consensus clustering of time series data, Postgraduate, A.YETERE(Student), 2014  
İYİGÜN C., Solution approaches for single-source capacitated multi facility weber problem, Postgraduate, H.DAMGACIOĞLU(Student), 2014  
İYİGÜN C., Probabilistic estimation framework on short term electricity load forecasting via parametric and nonparametric approaches, Postgraduate, E.ERGİN(Student), 2014  
İYİGÜN C., SÜRAL H., Generalization of restricted planar location problems: Unified meta-heuristics for single facility case, Postgraduate, M.SALEH(Student), 2013  
İYİGÜN C., On the parametric and nonparametric prediction methods for electricity load forecasting, Postgraduate, E.ERİŞEN(Student), 2013  
İyigün C., Tural M. K., Heuristics for a continuous multi-facility location problem with demand regions, Postgraduate, D.DİNLER(Student), 2013  
İYİGÜN C., Heuristic methods for the stochastic lot-sizing problem under the static-dynamic uncertainty strategy, Postgraduate, A.CEM(Student), 2013  
İYİGÜN C., İLK DAĞ Ö., Clustering of time-course gene expression data with dissimilar replicates, Postgraduate, O.ÇINAR(Student), 2013  
İYİGÜN C., BAYINDIR Z. P., Network planning of walk-in clinics on roadsides in Africa, Postgraduate, S.TAYMAZ(Student), 2013  
İYİGÜN C., BATMAZ İ., An algorithm for the forward step of adaptive regression splines via mapping approach, Doctorate, E.KARTAL(Student), 2012  
İYİGÜN C., Location analysis of the Mobile/24 emergency service vehicles of a case company, Postgraduate, R.MELTEM(Student), 2012  
BATMAZ İ., İYİGÜN C., An Algorithm for the forward step of adaptive regression splines via mapping approach, Doctorate, E.Kartal(Student), 2012  
İYİGÜN C., Bounding procedures on bi-directional labeling algorithm of TDVRPTW in branch-and-cut-and-price framework, Postgraduate, S.KÖKTEN(Student), 2011  
İYİGÜN C., Robust facility location with mobile customers, Postgraduate, E.GÜL(Student), 2011  
İYİGÜN C., A classification algorithm using mahalanobis distance clustering of data with applications on biomedical data sets, Postgraduate, B.DURAK(Student), 2011  
İYİGÜN C., Measuring the efficiency of the Turkish electric distribution sector using stochastic frontier analysis, Postgraduate, A.ÇELEN(Student), 2011  
İYİGÜN C., KARASAKAL E., A multiple criteria sorting approach based on distance functions, Postgraduate, B.ÇELİK(Student), 2011

### **Advising Graduates (Non-Thesis)**

İyigün C., A DATA MINING APPROACH FOR PREDICTIVE MAINTENANCE TO REDUCE FAILURE TIME AND PRODUCTION LOSS COST IN ROKETSAN INC., Masters (Non-Thesis, Evening Education), M.Hakan(Student), 2020

## Jury Memberships

Competition, YAD Uygulama Odulu , Middle East Technical University, July, 2019

Competition, YA/EM Ogrenci Yarismasi Proje Yarismasi, Middle East Technical University, June, 2018

Competition, YAD Uygulama Odulu , Middle East Technical University, June, 2018

## Designed Lessons

İyigün C., Gürel S., Süral H., Scientific Computing for Industrial Engineering, Undergraduate, 2014 - 2015

İyigün C., Monte Carlo Simulation for Operations Analysis, Postgraduate, 2012 - 2013

İyigün C., Data Mining for Business Intelligence, Postgraduate, 2010 - 2011

İyigün C., Introduction to Data Mining, Undergraduate, 2009 - 2010

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

- I. **Potential-based reward shaping using state–space segmentation for efficiency in reinforcement learning**  
Bal M. İ., AYDIN H., İYİGÜN C., POLAT F.  
Future Generation Computer Systems, vol.157, pp.469-484, 2024 (SCI-Expanded)
- II. **Population-based exploration in reinforcement learning through repulsive reward shaping using eligibility traces**  
Bal M. İ., İYİGÜN C., POLAT F., AYDIN H.  
Annals of Operations Research, no.2, pp.689-725, 2024 (SCI-Expanded)
- III. **An analysis of ambulance location problem from an equity perspective**  
Akdogan M. A., BAYINDIR Z. P., İYİGÜN C.  
Socio-Economic Planning Sciences, vol.90, 2023 (SCI-Expanded)
- IV. **Crowd-aware Thresholded Loss for Object Detection in Wide Area Motion Imagery**  
Hatipoglu P. U., İYİGÜN C., KALKAN S.  
PFG - Journal of Photogrammetry, Remote Sensing and Geoinformation Science, vol.91, no.5, pp.339-364, 2023 (SCI-Expanded)
- V. **An evaluation of a novel approach for clustering genes with dissimilar replicates**  
Cinar O., İYİGÜN C., İLK DAĞ Ö.  
COMMUNICATIONS IN STATISTICS-SIMULATION AND COMPUTATION, vol.51, no.12, pp.7458-7471, 2022 (SCI-Expanded)
- VI. **A healthcare facility location problem for a multi -disease, multi -service environment under risk aversion**  
Taymaz S., Iyigun C., Bayindir Z. P., Dellaert N. P.  
SOCIO-ECONOMIC PLANNING SCIENCES, vol.71, 2020 (SCI-Expanded)
- VII. **Heuristic methods for the capacitated stochastic lot-sizing problem under the static-dynamic uncertainty strategy**  
Randa A. C., Dogru M. K., İyigün C., Ozen U.  
COMPUTERS & OPERATIONS RESEARCH, vol.109, pp.89-101, 2019 (SCI-Expanded)
- VIII. **Generalization of the restricted planar location problems: Unified metaheuristic algorithms**  
Farham M. S., SÜRAL H., İYİGÜN C.  
COMPUTERS & OPERATIONS RESEARCH, vol.99, pp.48-66, 2018 (SCI-Expanded)
- IX. **Locating emergency vehicles with an approximate queuing model and a meta-heuristic solution approach**  
AKDOĞAN M. A., BAYINDIR Z. P., İYİGÜN C.  
TRANSPORTATION RESEARCH PART C-EMERGING TECHNOLOGIES, vol.90, pp.134-155, 2018 (SCI-Expanded)

- X. **Clustering of short time-course gene expression data with dissimilar replicates**  
Cinar O., İLK Ö., İYİĞÜN C.  
ANNALS OF OPERATIONS RESEARCH, vol.263, pp.405-428, 2018 (SCI-Expanded)
- XI. **A column generation approach for the location-routing problem with time windows**  
Farham M. S., SÜRAL H., İYİĞÜN C.  
COMPUTERS & OPERATIONS RESEARCH, vol.90, pp.249-263, 2018 (SCI-Expanded)
- XII. **Temporal clustering of time series via threshold autoregressive models: application to commodity prices**  
Aslan S., Yozgatlıgil C., İyigun C.  
ANNALS OF OPERATIONS RESEARCH, vol.260, pp.51-77, 2018 (SCI-Expanded)
- XIII. **Early warning on stock market bubbles via methods of optimization, clustering and inverse problems**  
Kurum E., Weber G., İYİĞÜN C.  
ANNALS OF OPERATIONS RESEARCH, vol.260, pp.293-320, 2018 (SCI-Expanded)
- XIV. **Has the climate been changing in Turkey? Regional climate change signals based on a comparative statistical analysis of two consecutive time periods, 1950-1980 and 1981-2010**  
Turkes M., Yozgatlıgil C., Batmaz İ., İyigün C., Koc E. K., Fahmı F. M., Aslan S.  
CLIMATE RESEARCH, vol.70, no.1, pp.77-93, 2016 (SCI-Expanded)
- XV. **Heuristics for a continuous multi-facility location problem with demand regions**  
DİNLER D., TURAL M. K., İYİĞÜN C.  
COMPUTERS & OPERATIONS RESEARCH, vol.62, pp.237-256, 2015 (SCI-Expanded)
- XVI. **A genetic algorithm for the uncapacitated single allocation planar hub location problem**  
Damgacioglu H., DİNLER D., ÖZDEMİREL N. E., İYİĞÜN C.  
COMPUTERS & OPERATIONS RESEARCH, vol.62, pp.224-236, 2015 (SCI-Expanded)
- XVII. **The Weber problem in congested regions with entry and exit points**  
Farham M. S., SÜRAL H., İYİĞÜN C.  
COMPUTERS & OPERATIONS RESEARCH, vol.62, pp.177-183, 2015 (SCI-Expanded)
- XVIII. **A probabilistic multiple criteria sorting approach based on distance functions**  
ÇELİK B., KARASAKAL E., İYİĞÜN C.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.42, no.7, pp.3610-3618, 2015 (SCI-Expanded)
- XIX. **Efficient adaptive regression spline algorithms based on mapping approach with a case study on finance**  
Koc E. K., İYİĞÜN C., BATMAZ İ., Weber G.  
JOURNAL OF GLOBAL OPTIMIZATION, vol.60, no.1, pp.103-120, 2014 (SCI-Expanded)
- XX. **Restructuring forward step of MARS algorithm using a new knot selection procedure based on a mapping approach**  
Koc E. K., İYİĞÜN C.  
JOURNAL OF GLOBAL OPTIMIZATION, vol.60, no.1, pp.79-102, 2014 (SCI-Expanded)
- XXI. **The planar hub location problem: a probabilistic clustering approach**  
İyigun C.  
ANNALS OF OPERATIONS RESEARCH, vol.211, no.1, pp.193-207, 2013 (SCI-Expanded)
- XXII. **Clustering current climate regions of Turkey by using a multivariate statistical method**  
İyigün C., Turkes M., Batmaz İ., Yozgatlıgil C., Purutcuoglu V., Koc E. K., Ozturk M. Z.  
THEORETICAL AND APPLIED CLIMATOLOGY, vol.114, pp.95-106, 2013 (SCI-Expanded)
- XXIII. **Comparison of missing value imputation methods in time series: the case of Turkish meteorological data**  
Yozgatlıgil C., Aslan S., İyigün C., Batmaz İ.  
THEORETICAL AND APPLIED CLIMATOLOGY, vol.112, pp.143-167, 2013 (SCI-Expanded)
- XXIV. **Probabilistic programming models for traffic incident management operations planning**  
Ozbay K., İyigun C., Baykal-Gursoy M., XIAO W.  
ANNALS OF OPERATIONS RESEARCH, vol.203, no.1, pp.389-406, 2013 (SCI-Expanded)

- XXV. **Modeling of Bus Transit Driver Availability for Effective Emergency Evacuation in Disaster Relief**  
Morgul E. F., Cavus O., Ozbay K., İYİĞÜN C.  
TRANSPORTATION RESEARCH RECORD, no.2376, pp.45-55, 2013 (SCI-Expanded)
- XXVI. **A generalized Weiszfeld method for the multi-facility location problem**  
Iyigun C., Ben-Israel A.  
OPERATIONS RESEARCH LETTERS, vol.38, no.3, pp.207-214, 2010 (SCI-Expanded)
- XXVII. **Contour approximation of data: A duality theory**  
Iyigun C., Ben-Israel A.  
LINEAR ALGEBRA AND ITS APPLICATIONS, vol.430, no.10, pp.2771-2780, 2009 (SCI-Expanded)
- XXVIII. **Probabilistic D-clustering**  
Ben-Israel A., Iyigun C.  
JOURNAL OF CLASSIFICATION, vol.25, no.1, pp.5-26, 2008 (SCI-Expanded)
- XXIX. **PROBABILISTIC DISTANCE CLUSTERING ADJUSTED FOR CLUSTER SIZE**  
Iyigun C., BEN-ISRAEL A.  
PROBABILITY IN THE ENGINEERING AND INFORMATIONAL SCIENCES, vol.22, no.4, pp.603-621, 2008 (SCI-Expanded)
- XXX. **Clustering-based methodology for determining optimal roadway configuration of detectors for travel time estimation**  
Bartin B., OZBAY K., Lyigun C.  
TRANSPORTATION RESEARCH RECORD, no.2000, pp.98-105, 2007 (SCI-Expanded)

## Articles Published in Other Journals

- I. **KİŞİSEL BAKIM ÜRÜNLERİNDE YEREL ZİNCİR MÜŞTERİLERİ İÇİN TEDARİK ZİNCİRİ İYİLEŞTİRİLMESİ**  
ÇETİN D. H., DUMAN E., GÜRTÜRK Z., SAVCI A., UYAR G., İYİĞÜN C., KARAER Ö.  
Endüstri Mühendisliği Dergisi, vol.26, pp.21-34, 2015 (Peer-Reviewed Journal)
- II. **Meteorolojik Zaman Serilerinde Kayıp Veri Tahmin Yöntemlerinin Başarımlarının Korelasyon Boyutu Analiziyle Karşılaştırılması**  
ASLAN S., YOZGATLIGİL C., İYİĞÜN C., BATMAZ İ., TATLI H.  
İSTATİSTİK ARAŞTIRMA DERGİSİ, vol.8, pp.55-67, 2011 (Peer-Reviewed Journal)
- III. **Türkiye İklim Bölgelerinin Hiyerarşik Kümeleme Yöntemi ile Belirlenmesi**  
Kartal E., İyigün C., Fahmi M. F., Yozgatligil C., Purutçuoğlu Gazi V., Batmaz İ., Köksal G., Turkes M.  
İSTATİSTİK ARAŞTIRMA DERGİSİ, vol.8, pp.13-25, 2011 (Peer-Reviewed Journal)
- IV. **Investment Planning in Base Stations**  
Kaya O., Kendirci S., Kılıçoğlu Ç., Okay B., Özüretmen C., İyigün C., Kayaligil S., Köksal G.  
Endüstri Mühendisliği, vol.21, no.3, pp.2-24, 2010 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Location Problems with Demand Regions**  
DİNLER D., TURAL M. K., İYİĞÜN C.  
in: Global Logistics Management, Kara Bahar Y., Sabuncuoğlu İhsan, Bidanda Bopaya, Editor, CRC Press, pp.237-252, 2014
- II. **Determining the Climate Zones of Turkey by Center-Based Clustering Methods**  
Fahmi F., Kartal E., Iyigün C., Turkes M., Batmaz I., Yozgatligil C., Purutçuoğlu Gazi V., Köksal G.  
in: Nonlinear and Complex Dynamics: Applications in Physical Biological and Financial Systems, J.A. Tenreiro Machado, Baleanu, D. and A. Luo, Editor, Springer, London/Berlin, London, pp.171-178, 2011
- III. **Probabilistic Distance Clustering, Theory and Applications**  
İyigün C., Ben-Israel A.

in: Clustering Challenges in Biological Networks, S. Butenko, W. A. Chaovalitwongse, P. Pardalos, Editor, World Scientific Publishing, Singapore, pp.29-51, 2009

**IV. Recent Advances in Optimization Models for Data Mining: Clustering, Feature Selection and Classification**

Fan Y., İyigün C., Chaovalitwongse W. A.

in: Data Mining and Mathematical Programming (CRM Proceedings & Lecture Notes, Book 45), P. Hansen, P. M. Pardalos, Editor, American Mathematical Society, New-York, pp.67-95, 2008

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

- I. **Mixed integer programming and heuristics approaches for clustering with cluster-based feature selection**  
İyigün C., Onen Oz S.  
2019 INFORMS ANNUAL MEETING, Washington, United States Of America, 20 - 23 October 2019, pp.1
- II. **Kümeleme Probleminde Küme Bazlı Öznitelik Secimi**  
İyigün C., Onen Oz S.  
39. Yoneylem Arastirmasi ve Endustri Muhendisligi Kongresi, Ankara, Turkey, 12 - 14 June 2019, pp.1
- III. **Engineering Effort Estimation for Product Development Projects**  
Yurt Z. O., İyigun C., Bakal P.  
IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), Maicao, Colombia, 15 - 18 December 2019, pp.774-778
- IV. **Genetic Algorithm for Planar Capacitated Single Allocation Hub Location Problem**  
İyigün C., Eroglu D. I., Pamukcu D.  
Informs Annual Meeting, 2018, Arizona, United States Of America, 4 - 07 November 2018, pp.1
- V. **Probabilistic Distance Clustering on Networks**  
İyigün C., Eroglu D. I.  
INFORMS Annual Meeting, 2018, Arizona, United States Of America, 4 - 07 November 2018, pp.1
- VI. **A matheuristic for binary classification of data sets using hyperboxes**  
Akbulut D., İyigün C., Özdemirel N. E.  
29th EURO Conference, Valencia, Spain, 8 - 11 July 2018, pp.1
- VII. **Aglarda Yumusak Kumelem Problemleri ve Metaszgisel Cozum Yaklasimi**  
Eroglu D. İ., İyigün C.  
38. YA/EM Ulusal Kongresi, Eskişehir, Turkey, 26 - 29 June 2018, pp.1
- VIII. **Baglantililik Bazli Komsuluk Kurma ile Cok Amacli Genetik Kumele Problemi**  
Alakus C., İyigün C., Özdemirel N. E.  
38. YA/EM Uusal Kongresi, Eskişehir, Turkey, 26 - 29 June 2018, pp.1
- IX. **Conditional Value at Risk as SVR Minimization**  
ERYİĞİT E., İYİĞÜN C., ÇAVUŞ Ö.  
2017 INFORMS Annual Meeting, 22 - 25 October 2017
- X. **Feature Weighting Problem in k-Nearest Neighbor Classifier and Evolutionary Solution Approach**  
İYİĞÜN C., GÜLEÇ N.  
12TH INFORMS WORKSHOP ON DATA MINING DECISION ANALYTICS WORKSHOP, Houston, United States Of America, 21 October 2017
- XI. **A Location Problem for Emergency Healthcare Facilities**  
BAYINDIR Z. P., İYİĞÜN C., İŞBİLİR M.  
OR2017, International Conference on Operations Research – Annual Conference of the German Operations Research Society, 06 September 2016 - 08 September 2017
- XII. **A Location Problem for Emergency Healthcare Facilities**  
BAYINDIR Z. P., İYİĞÜN C., işbilir m.  
INTERNATIONAL CONFERENCE ON OPERATIONS RESEARCH, 6 - 08 September 2017

- XIII. **Kapasite Kısıtlı Merkez Seçimi Problemi için Genetik Algoritma**  
EROĞLU D. İ., PAMUKÇU D., İYİĞÜN C., ÖZDEMİREL N. E.  
37. YÖNEYLEM ARAŞTIRMASI VE ENDÜSTRİ MÜHENDİSLİĞİ ULUSAL KONGRESİ, Turkey, 5 - 07 July 2017
- XIV. **A Geometrical Approach to Forecast Burst-time of Stock Market Bubbles**  
KÜRÜM E., WEBER G. W., İYİĞÜN C.  
21st IFORS Annual Meeting, 17 July - 21 January 2017
- XV. **Location analysis of emergency vehicles using an approximate queueing model**  
AKDOĞAN M. A., BAYINDIR Z. P., İYİĞÜN C.  
19th European-Operational-Research-Societies Working Group on Transportation Meeting (EWGT), İstanbul, Turkey, 5 - 07 September 2016, vol.22, pp.430-439
- XVI. **Dynamic clustering of multiple multivariate time series Application to climate data**  
YOZGATLIGİL C., ASLAN S., İYİĞÜN C.  
The 22nd International Conference on Computational Statistics, Oviedo, Spain, 23 - 26 August 2016
- XVII. **ACİL TIBBİ YARDIM ARAÇLARININ GENEL AĞLARDA YAKLAŞIK BİR KUYRUK MODELİ VE SEZGİSEL BİR ÇÖZÜM YAKLAŞIMI İLE LOKASYONUNUN BELİRLENMESİ**  
AKDOĞAN M. A., BAYINDIR Z. P., İYİĞÜN C.  
Yöneylem Araştırması ve Endüstri Mühendisliği 36. Ulusal Kongresi, Turkey, 13 - 15 July 2016
- XVIII. **The Two echelon Freight Transportation Network in City Logistics**  
Farham M. S., SÜRAL H., İYİĞÜN C.  
28th European Conference on Operational Research, Poznan, Poland, 3 - 06 July 2016
- XIX. **A Supervised Biclustering Optimization Model for Feature Selection in Biomedical Dataset Classification**  
Arikan S. D. O., İYİĞÜN C.  
1st International Conference on Data Mining and Big Data (DMBD), Balvi, Latvia, 25 - 30 June 2016, vol.9714, pp.196-204
- XX. **Applying data mining techniques to detect abnormal flight characteristics**  
ASLANER H. E., UNAL C., İYİĞÜN C.  
Conference on Machine Intelligence and Bio-Inspired Computation - Theory and Applications X, Maryland, United States Of America, 20 April 2016, vol.9850
- XXI. **On the Performance Analysis of a New Knot Selection Procedure in MARS**  
İYİĞÜN C., KARTAL KOÇ E.  
INFORMS Workshop on Data Mining and Analytics, 31 October 2015
- XXII. **Türkiye İklim Bölgelerinin On İki Klimatolojik Değişken Kullanarak AGNES Konsensüs Kümeleme Tekniği ile Belirlenmesi**  
MURAT T., İYİĞÜN C., BATMAZ İ., YOZGATLIGİL C., Kartal Koç E., YETERE KURSUN A.  
YAEM2015, Turkey, 9 - 11 September 2015
- XXIII. **Eşik Değerli Doğrusal Olmayan Zaman Serisi Modeliyle Farklı Rejimlerin Belirlenmesi Türkiye Yağış Verileri Üzerine Bir Uygulama**  
ASLAN S., YOZGATLIGİL C., İYİĞÜN C., BATMAZ İ.  
YAEM2015, Turkey, 9 - 11 September 2015
- XXIV. **Temporal Clustering of Commodities via Threshold Autoregressive Models**  
ASLAN S., YOZGATLIGİL C., İYİĞÜN C.  
55th Meeting of the EWGCFM (EWGCFM 2015), 14 - 16 May 2015
- XXV. **Heuristics for a Continuous Multi-facility Location Allocation Problem with Demand Regions**  
DİNLER D., TURAL M. K., İYİĞÜN C.  
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- XXVI. **Precipitation Forecasting Assessment via Nonlinear Autoregressive Neural Network and Vector Autoregressive Models**  
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**XXVIII. Facilitating adoption of Enterprise Resource Planning (ERP) systems: The state of the art**

Ozkan S., Kurt N., İYİĞÜN C.

18th Americas Conference on Information Systems 2012, AMCIS 2012, Seattle, WA, United States Of America, 9 - 12 August 2012, vol.4, pp.3037

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Kursun A. Y., İYİĞÜN C., YOZGATLIGİL C., BATMAZ İ.

10th International Conference on Fuzzy Logic and Intelligent Technologies in Nuclear Science (FLINS), İstanbul, Turkey, 26 - 29 August 2012, vol.7, pp.913-918

**XXX. UNCERTAINTY AND A NEW MEASURE FOR CLASSIFICATION UNCERTAINTY**

Damgacioglu H., İYİĞÜN C.

10th International Conference on Fuzzy Logic and Intelligent Technologies in Nuclear Science (FLINS), İstanbul, Turkey, 26 - 29 August 2012, vol.7, pp.925-930

**XXXI. Detection of seasonal changes in climate data by comparative analysis A case study for Turkey**

AKAL T., FAHMİ F., KARTAL E., PURUTÇUOĞLU GAZİ V., İYİĞÜN C., YOZGATLIGİL C., BATMAZ İ.

25th European Conference on Operations Research, 8 - 11 July 2012

**XXXII. Investigating the Seasonal Patterns of Continental Central Anatolia by Clustering**

AKAL T., PURUTÇUOĞLU GAZİ V., BATMAZ İ., KARTAL KOÇ E., İYİĞÜN C., YOZGATLIGİL C.

The 25th Conference of European Chapter on Combinatorial Optimization, 26 - 28 April 2012

**XXXIII. Türkiye İklim Bölgelerinin Hiyerarşik Kümeleme Yöntemi ile Belirlenmesi**

KARTAL KOÇ E., FAHMİ F., İYİĞÜN C., TÜRKER M., YOZGATLIGİL C., PURUTÇUOĞLU GAZİ V., BATMAZ İ., KÖKSAL G.

7. İSTATİSTİK GÜNLERİ SEMPOZYUMU, Turkey, 28 June 2010, pp.137-138

### **Supported Projects**

İYİĞÜN C., HATİPOĞLU P. U., Project Supported by Higher Education Institutions, Enerji Tüketim Takip Sisteminde Zaman Serileri Sınıflandırma Problemi için Optimizasyon Modellerinin ve Sezgisel Yaklaşımların Geliştirilmesi, 2015 - 2022

Polat F., İyigün C., TUBITAK Project, YÖK Program ve Kontenjan Yönetim Sistemi, 2018 - 2020

Karagöz P., Karaman A. C., İyigün C., Özcan E., Akar H., Kuzu Demir E. B., Polat F., TUBITAK Project, YÖK Program Ve Kontenjan Yönetim Sistemi YÖK PKYS, 2018 - 2020

İyigün C., Uzelgencer A., TUBITAK Project, Bulut Bilişim Tabanlı Anlık Raf - Stok Takibi Ve Elde Edilen Büyük Verinin Hızlı Tepkisel Üretim (Quick Response Manufacturing - QRM) Kapsamında Kullanılması, 2018 - 2019

İyigün C., Gürel S., Dusmez Tek E., TUBITAK Project, Mağazalar Arası Transfer Optimizasyonu , 2017 - 2019

İyigün C., Çavuş Ö., Tanrisever F., Yılmaz M., TUBITAK Project, Türkiye Elektrik Piyasası'nda Yatırım ve Ticaret Karar Destek Sistemi, 2018 - 2018

YOZGATLIGİL C., ASLAN S., İYİĞÜN C., Project Supported by Higher Education Institutions, Zamana Bağlı Değişen Emtia Fiyat İndeksi/İndeksleri Oluşturulması, 2016 - 2017

İyigün C., Dogan T., TUBITAK Project, SEAS Smart Energy Aware Systems, 2014 - 2015

SÜRAL H., İYİĞÜN C., GÜREL S., Project Supported by Higher Education Institutions, Şehir Lojistiği için Lisans Araştırmaları, 2014 - 2015

İYİĞÜN C., Project Supported by Higher Education Institutions, Olasılıklı Uzaklık Kümeleme Metodunun Geliştirilmesi Ve Uygulamaları, 2011 - 2013

Batmaz İ., Yozgatlıgil C., İyigün C., Purutçuoğlu Gazi V., Köksal G., Project Supported by Higher Education Institutions, Veri Madenciliği Yöntemleri ile Türkiye İklim Bölgelerinin Yeniden Belirlenmesi, 2010 - 2010

### **Contractual Researches**

İYİGÜN C., Web Tabanlı Gerçek Zamanlı Talep ve Fiyat Tahmin Platformu Gelistirilmesi, 2013 - 2013

İYİGÜN C., E-Ticaret Servis ve Sistem Test Süreçleri, 2013 - 2013

## Activities in Scientific Journals

ANNALS OF OPERATIONS RESEARCH, Assistant Editor/Section Editor, 2019 - Continues

## Memberships / Tasks in Scientific Organizations

INFORMS International Activities Committee , Board Member, 2017 - Continues, United States Of America

Yoneylem Arastirmasi Dernegi, Board Member, 2011 - Continues, Turkey

INFORMS Data Mining Section, Board Member, 2017 - 2020, United States Of America

Yoneylem Arastirmasi Dernegi, Secretary General, 2013 - 2017

## Scientific Refereeing

COMPUTERS AND OPERATIONS RESEARCH, SCI Journal, November 2021

TUBITAK Project, 3501 - National Young Researcher Career Development Program, Middle East Technical University, Turkey, November 2021

TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Middle East Technical University, Turkey, November 2021

TUBITAK Project, 3501 - National Young Researcher Career Development Program, Middle East Technical University, Turkey, November 2021

ANNALS OF OPERATIONS RESEARCH, SCI Journal, October 2021

TUBITAK Project, 3501 - National Young Researcher Career Development Program, Middle East Technical University, Turkey, June 2021

COMPUTERS & OPERATIONS RESEARCH, SCI Journal, November 2020

TUBITAK Project, 3501 - National Young Researcher Career Development Program, Middle East Technical University, Turkey, July 2020

TUBITAK Project, 3501 - National Young Researcher Career Development Program, Middle East Technical University, Turkey, May 2020

TUBITAK Project, 3501 - National Young Researcher Career Development Program, Middle East Technical University, Turkey, May 2020

COMPUTERS & OPERATIONS RESEARCH, SCI Journal, September 2019

ANNALS OF OPERATIONS RESEARCH, SCI Journal, August 2019

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EURO Journal on Computational Optimization, Journal Indexed in ESCI, May 2019

EURO Journal On Computational Optimization, Journal Indexed in ESCI, March 2019

EUROPEAN JOURNAL OF OPERATIONAL RESEARCH, SCI Journal, January 2019

EURO Journal on Computational Optimization, Journal Indexed in ESCI, December 2018

## Metrics

Publication: 78

Citation (WoS): 460

Citation (Scopus): 593

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H-Index (Scopus): 13

## **Congress and Symposium Activities**

2019 Informs Annual Meeting, Working Group, Washington, United States Of America, 2019

39. YAEM Ulusal Kongresi, Attendee, Ankara, Turkey, 2019

2018 Informs Annual Meeting, Working Group, Arizona, United States Of America, 2018

38. YAEM Ulusal Kongresi , Working Group, Eskişehir, Turkey, 2018