

# ESRA ÇAKIR

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### Öğrenim Bilgisi

Doktora

2020 - 2024

Galatasaray Üniversitesi, Fen Bilimleri Enstitüsü, Türkiye

Yüksek Lisans

2017 - 2020

Galatasaray Üniversitesi, Fen Bilimleri Enstitüsü, Türkiye

Lisans Çift Anadal

2015 - 2018

Galatasaray Üniversitesi, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği, Türkiye

Lisans

2012 - 2017

Galatasaray Üniversitesi, Mühendislik Ve Teknoloji Fakültesi, Bilgisayar Mühendisliği, Türkiye

### Yaptığı Tezler

Doktora, Two Novel MCDM Approaches "PODER" and "V-PARS": Evaluating Micromobility Modes in Paris and Istanbul, Galatasaray Üniversitesi, Fen Bilimleri Enstitüsü, 2024

Yüksek Lisans, Multi-objective decision-making approach for nuclear power plant installation, Galatasaray Üniversitesi, Fen Bilimleri Enstitüsü, 2020

### Akademik Unvanlar / Görevler

Araştırma Görevlisi

2019 - Devam Ediyor

Galatasaray Üniversitesi, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği

Araştırmacı

2024 - 2024

Universite de Lorraine, Laboratoire de Conception, Optimisation et Modélisation des Systèmes (LCOMS)

Araştırmacı

2023 - 2024

Université Paris-Dauphine: Paris IX, Laboratoire d'analyse et modélisation de systèmes pour l'aide à la décision (LAMSADE)

## Desteklenen Projeler

1. DEMİRÇİOĞLU M. E., ULUKAN H. Z., ÇAKIR E., Yksekğretim Kurumları Destekli Proje, Industrial Engineering applications on Fuzzy Logic Environment, 2022 - 2023
2. ULUKAN H. Z., ÇAKIR E., Yksekğretim Kurumları Destekli Proje, Endstri Mhendisliđinde Bulanık Kme Uygulamaları, 2020 - 2022

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

1. **Vector-Based Preference Aided Ranking System (V-PARS): Application on Micromobility Modes in Paris**  
Çakır E., Çađrı Tolga A. Ç.  
IEEE Access, cilt.12, ss.177533-177552, 2024 (SCI-Expanded)
2. **CIRCULAR INTUITIONISTIC FUZZY DECISION MAKING AND ITS APPLICATION**  
Çakır E., Tař M. A.  
EXPERT SYSTEMS WITH APPLICATIONS, cilt.0, sa.0, ss.1-34, 2023 (SCI-Expanded)
3. **Intuitionistic fuzzy multi-objective milk-run modelling under time window constraints**  
Çakır E., Ulukan H. Z., Kahraman C., lçer Sađlam C., Kuleli Pak B., Pekcan B.  
Journal Of Intelligent & Fuzzy Systems, cilt.0, sa.0, ss.1-16, 2022 (SCI-Expanded)
4. **Time-dependent Dijkstra's algorithm under bipolar neutrosophic fuzzy environment**  
ÇAKIR E., Ulukan Z., ACARMAN T.  
Journal of Intelligent and Fuzzy Systems, cilt.42, sa.1, ss.227-236, 2022 (SCI-Expanded)
5. **Spherical bipolar fuzzy weighted multi-facility location modeling for mobile COVID-19 vaccination clinics**  
Çakır E., Tař M. A., Ulukan H. Z.  
Journal Of Intelligent & Fuzzy Systems, cilt.0, sa.0, ss.1-14, 2022 (SCI-Expanded)
6. **A Hybrid Kruskal's Algorithm Based on Intuitionistic Fuzzy with Hamacher Aggregation Operator for Road Planning**  
Çakır E., Ulukan H. Z.  
International Journal of Fuzzy Systems, cilt.23, sa.4, ss.1003-1016, 2021 (SCI-Expanded)
7. **Fuzzy multi-objective decision making approach for nuclear power plant installation**  
ÇAKIR E., Ulukan Z.  
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, cilt.39, sa.5, ss.6339-6350, 2020 (SCI-Expanded)

## Diđer Dergilerde Yayınlanan Makaleler

1. **A Hybrid Machine Learning and Fuzzy Inference Approach with UAV for Indoor Virus Contamination Risk**  
Çakır E., Erdi F., Demirciođlu M. E., Tař M. A.  
International Journal of Engineering and Technology, cilt.15, sa.3, ss.94-99, 2023 (Hakemli Dergi)
2. **Covid-19 Geçici Ařılama Kliniklerinin Atanmasına Sezgisel Bir Yaklařım**  
Çakır E., Tař M. A.  
European Journal of Science and Technology, cilt.34, ss.360-366, 2022 (Hakemli Dergi)

3. **Circular Intuitionistic Fuzzy Multi-Criteria Decision Making Methodology**  
Çakır E., Taş M. A.  
Avrupa Bilim ve Teknoloji Dergisi, sa.28, ss.900-905, 2021 (Hakemli Dergi)
4. **Green Supplier Selection Using Game Theory Based on Fuzzy SWARA**  
Taş M. A., Çakır E.  
Sakarya Üniversitesi Fen Bilimleri Enstitüsü Dergisi, ss.1-14, 2021 (Hakemli Dergi)
5. **SPHERICAL FUZZY SWARA-MARCOS APPROACH FOR GREEN SUPPLIER SELECTION**  
Taş M. A., Çakır E., Ulukan H. Z.  
3C Tecnología, ss.115-133, 2021 (ESCI)
6. **WEB CONFERENCING SOFTWARE SELECTION WITH INTERVAL-VALUED FUZZY PARAMETERIZED INTUITIONISTIC FUZZY SOFT SETS**  
Çakır E., Ulukan H. Z.  
3C Tecnología, ss.53-65, 2021 (ESCI)
7. **KÜRESEL BULANIK KÜMELER İLE GÜVENİLİRLİK ANALİZİ**  
Çakır E., Ulukan H. Z.  
Mühendislik ve Tasarım Bilimleri Dergisi, cilt.9, sa.1, ss.230-239, 2021 (Hakemli Dergi)

## Kitap & Kitap Bölümleri

1. **A Hybrid Fuzzy MCDM Approach for Sustainable Health Tourism Sites Evaluation**  
Taş M. A., Çakır E.  
Handbook of Research on Advances and Applications of Fuzzy Sets and Logic, Said Broumi, Editör, IGI Global, Tunis, ss.77-104, 2022
2. **Digitalization on Aviation 4.0: Designing a Scikit-Fuzzy Control System for In-Flight Catering Customer Satisfaction**  
Çakır E., Ulukan H. Z.  
Intelligent and Fuzzy Techniques in Aviation 4.0, Kahraman C., Aydın S., Editör, Springer, London/Berlin, London, ss.123-146, 2022

## Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

1. **Artificial Intelligence StartUp Preference Ranking by Circular Intuitionistic Fuzzy PROMETHEE**  
Çakır E., Tarhan M.  
IEEE International Conference on Computer & Applications (IEEE/ICCA 2024), Cairo, Mısır, 17 - 19 Aralık 2024, ss.1-5
2. **Milk-run optimization under time windows for collection and replacement of low-charge e-scooters**  
Çakır E., İzcan Ö., Demircioğlu M. E.  
Research and Technologies for Society and Industry (RTSI 2024), Milan, İtalya, 18 - 20 Eylül 2024, ss.1-6
3. **Multi-Criteria Evaluation of Battery Electric Vehicles via Circular Intuitionistic Fuzzy PROMETHEE**  
Çakır E., Demircioğlu M. E.  
IEEE 18th International Symposium on Applied Computational Intelligence and Informatics, Budapest, Macaristan, 22 - 27 Mayıs 2024, ss.1-5
4. **New Multi Criteria Decision Making Methodology EFEE under Uncertainty on Paris City Micromobility**  
Çakır E., Tolga A. Ç.  
Intelligent and Fuzzy Systems (INFUS 2024), Çanakkale, Türkiye, 16 - 18 Temmuz 2024, ss.1-8
5. **Micromobility Evaluation in Istanbul: A Critical Review**  
Çakır E.  
3rd International Graduate Research Symposium (IGRS'24), İstanbul, Türkiye, 8 - 10 Mayıs 2024, ss.1-5

6. **Reviewing Micromobility Modes of Paris City by novel MCDM Approach: Extracted Framework Element Effect (EFEE)**  
Çakır E., Tolga A. Ç.  
33rd European conference on Operational Research (EURO 2024), Kobenhavn, Danimarka, 30 Haziran - 03 Temmuz 2024, ss.1
7. **Circular Intuitionistic Fuzzy AHP for Micromobility Evaluation**  
Çakır E.  
27TH INTERNATIONAL CONFERENCE ON MULTIPLE CRITERIA DECISION MAKING (MCDM2024), Tunis, Tunus, 2 - 07 Haziran 2024, ss.1
8. **Fuzzy Extracted Framework Element Effect (Fuzzy-EFEE) Methodology**  
Çakır E.  
27TH INTERNATIONAL CONFERENCE ON MULTIPLE CRITERIA DECISION MAKING (MCDM2024), Tunis, Tunus, 2 - 07 Haziran 2024, ss.1
9. **Criteria Weighting of Micromobility Modes via Extracted Framework Element Effect (EFEE) Methodology**  
Çakır E.  
2024 Systems and Information Engineering Design Symposium (SIEDS), Virginia, Amerika Birleşik Devletleri, 03 Mayıs 2024, ss.195-199
10. **Micromobility Evolution of İstanbul**  
Çakır E.  
13.Ulusal Lojistik ve Tedarik Zinciri Kongresi (ULTZK 2024), Afyonkarahisar, Türkiye, 16 - 18 Mayıs 2024, ss.1
11. **Novel Criteria Weighting Methodology EFEE: A Case of Micromobility Modes Assessment in İstanbul**  
Çakır E.  
10th International Conference on Vehicle Technology and Intelligent Transport Systems (VEHITS 2024), Angers, Fransa, 2 - 04 Mayıs 2024, ss.1-5
12. **Lot Sizing Problem with Fuzzy Capacitated Energy Sources**  
Çakır E., Akbalık A.  
International Conference on Sustainability in Energy and Buildings SEB-23, Bari, İtalya, 18 Eylül 2023
13. **Performance Evaluation of Green Ports via C-IFS AHP: A Case Study in Turkey**  
Taş M. A., Çakır E.  
The 17th International Conference on Business Excellence (ICBE 2023), Bucuresti, Romanya, 22 - 24 Mart 2023, ss.1-10
14. **Neutrosophic Fuzzy Selected Element Reduction Approach (NF-SERA): Assessment of E-Scooter Parking Area**  
ÇAKIR E.  
2023 IEEE Symposium Series on Computational Intelligence (SSCI), meksico city, Meksika, 5 - 08 Aralık 2023, cilt.1, ss.1234-1238
15. **EVALUATION OF BRANDS' SOCIAL MEDIA MARKETING PERFORMANCE DURING COVID PANDEMIC: A CASE OF FAST FOOD CHAINE**  
Seğmenoğlu F., Çakır E.  
BİLTEK-VIII INTERNATIONAL SYMPOSIUM ON CURRENT DEVELOPMENTS IN SCIENCE, TECHNOLOGY AND SOCIAL SCIENCES, Paris, Fransa, 24 Ekim 2023, ss.219-227
16. **IoT Feature Assessment for Smart Cities via Intuitionistic Fuzzy Selected Element Reduction Approach (IF-SERA)**  
ÇAKIR E., DEMİRCİOĞLU M. E.  
6th International Conference on Signal Processing and Information Communications, Singapore, Singapur, 25 - 27 Şubat 2023
17. **Circular Intuitionistic Fuzzy PROMETHEE Methodology: A Case of Smart Cities Evaluation**  
Çakır E., Demircioğlu M. E.  
International Conference on Intelligent and Fuzzy Systems - INFUS 2023, İstanbul, Türkiye, 22 - 24 Ağustos 2023, ss.353-361

18. **A Hybrid Machine Learning and Fuzzy Inference Approach with UAV for Indoor Virus Contamination Risk**  
Çakır E., Erdi F., Taş M. A., Demircioğlu M. E.  
11th International Conference on Nano and Materials Science ICNMS 2023, Singapore, Singapur, 13 - 15 Ocak 2023, ss.1-6
19. **IoT Based Smart Cities Evaluation By Circular Intuitionistic Fuzzy Analytic Hierarchy Process**  
Çakır E.  
International Symposium of the Analytic Hierarchy Process 2022, Web Conference, 15 - 18 Aralık 2022, ss.1-5
20. **UAV Fuzzy Inference System Design for Covid-19 Infection Risk Assessment**  
Çakır E., Erdi F.  
2022 Innovations in Intelligent Systems and Applications Conference (ASYU), Antalya, Türkiye, 7 - 09 Eylül 2022, ss.1-6
21. **Fuzzy inference design and machine learning approach for UAV image: case of virus contamination**  
Çakır E., Erdi F.  
LMSCM 2022: 20 th International Logistics and Supply Chain Congress , İstanbul, Türkiye, 20 - 21 Ekim 2022, ss.1
22. **A New Weighting Method in Fuzzy Multi-criteria Decision Making: Selected Element Reduction Approach (SERA)**  
Çakır E., Taş M. A., Demircioğlu M. E.  
2022 NORTH AMERICAN FUZZY INFORMATION PROCESSING SOCIETY CONFERENCE NAFIPS'2022, Halifax, Kanada, 31 Mayıs - 03 Haziran 2022, ss.1-6
23. **Circular Intuitionistic Fuzzy Analytic Hierarchy Process for Remote Working Assessment in Covid-19**  
Çakır E., Taş M. A.  
International Conference on Intelligent and Fuzzy Systems INFUS 2022, İzmir, Türkiye, 01 Temmuz 2022, ss.1-8
24. **Intuitionistic Fuzzy Selected Element Reduction Approach (IF-SERA) on Service Quality Evaluation of Digital Suppliers**  
Çakır E., Taş M. A., Demircioğlu M. E.  
International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems IPMU 2022, Milan, İtalya, 11 - 15 Temmuz 2022, ss.141-150
25. **A New Circular Intuitionistic Fuzzy MCDM: A Case of Covid-19 Medical Waste Landfill Site Evaluation**  
Çakır E., Taş M. A., Ulukan H. Z.  
IEEE 21st International Symposium on Computational Intelligence and Informatics (CINTI 2021), Budapest, Macaristan, 18 - 20 Kasım 2021, ss.1-5
26. **Locating Cell on Wheels in Emergency Using Fuzzy COCOSO and Weighted Minimax Methods**  
Çakır E., Taş M. A., Ulukan H. Z.  
LMSCM2021 19th International Logistics and Supply Chain Congress, Gaziantep, Türkiye, 21 - 22 Ekim 2021, ss.1
27. **Neutrosophic Fuzzy MARCOS Approach for Sustainable Hybrid Electric Vehicle Assessment**  
Çakır E., Taş M. A., Ulukan H. Z.  
IEEE SMC 2021, Melbourne, Avustralya, 17 - 20 Ekim 2021, ss.1-6
28. **Ranking Triangular and Trapezoidal Fuzzy MARCOS Methods on Road Risk**  
Taş M. A., Çakır E.  
Conference: 6 th online Forum on Research and Technologies for Society and Industry (IEEE RTSI 2021)At, Naples, İtalya, 6 - 09 Eylül 2021, ss.370-375
29. **A Fuzzy Modeling for Time Constrained Vehicle Routing Problem**  
Çakır E., Ulukan H. Z., Kahraman C.  
INFUS 2021: Intelligent and Fuzzy Techniques for Emerging Conditions and Digital Transformation , İstanbul, Türkiye, 24 - 26 Ağustos 2021, cilt.307, ss.511-519
30. **Circular Intuitionistic Fuzzy Sets in Multi criteria Decision Making**  
Çakır E., Taş M. A., Ulukan H. Z.  
11th Conference on Theory and Applications of Soft Computing, Computing with Words and Perceptions, ICSCCW 2021, Antalya, Türkiye, 23 - 24 Ağustos 2021, ss.1-8
31. **Cylindrical Neutrosophic Single-Valued Fuzzy MCDM Approach on Electric Vehicle Charging Station**

### **Relocation with Time-Dependent Demand**

Çakır E., Taş M. A., Ulukan H. Z.

INFUS 2021: Intelligent and Fuzzy Techniques for Emerging Conditions and Digital Transformation , İstanbul, Türkiye, 24 - 26 Ağustos 2021, cilt.308, ss.355-363

### **32. Cylindrical Neutrosophic Fuzzy Heuristic Approach to Locate Mobile Pandemic Test Labs**

Çakır E., Taş M. A., Ulukan H. Z.

2021 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2021), Luxembourg, Lüksemburg, 11 - 14 Temmuz 2021, ss.1-6

### **33. COVID-19 Geçici Test Laboratuvarları Yerleşimi İçin Bulanık Tabanlı Tasarruf Algoritması**

Çakır E., Taş M. A., Ulukan H. Z.

40. Yöneylem Araştırması - Endüstri Mühendisliği Kongresi (YAEM 2021), İstanbul, Türkiye, 4 - 07 Temmuz 2021, ss.87

### **34. Türkiye'deki Limanların Çevresel Sürdürülebilirlik Performanslarının Bulanık Çok Kriterli Karar Verme Metodu İle Değerlendirilmesi**

Taş M. A., Çakır E., Ulukan H. Z.

40. Yöneylem Araştırması - Endüstri Mühendisliği Kongresi (YAEM 2021), İstanbul, Türkiye, 4 - 07 Temmuz 2021, ss.19

### **35. Fuzzy Linguistic Prolog on Route Prioritisation**

Çakır E.

29th Signal Processing and Communications Applications Conference (SIU 2021), İstanbul, Türkiye, 9 - 11 Haziran 2021, ss.1-4

### **36. Neutrosophic Fuzzy Weighted Saving Heuristic for COVID-19 Vaccination**

Çakır E., Taş M. A., Ulukan H. Z.

2021 Systems and Information Engineering Design Symposium (SIEDS), Virginia, Amerika Birleşik Devletleri, 29 - 30 Nisan 2021, ss.1-5

### **37. An Intuitionistic Fuzzy MCDM Approach Adapted to Minimum Spanning Tree Algorithm for Spreading Content on Social Media**

ÇAKIR E., ULUKAN H. Z.

11th IEEE Annual Computing and Communication Workshop and Conference, CCWC 2021, Nevada, Amerika Birleşik Devletleri, 27 - 30 Ocak 2021, ss.174-179

### **38. Web Conferencing Software Selection with IntervalValued Fuzzy Parameterized Intuitionistic Fuzzy Soft Sets**

Çakır E., Ulukan H. Z.

6th International Conference on Recent Trends in Computer Science and Electronics January 5-7, 2021, University of Hawaii, USA, Hawaii, Amerika Birleşik Devletleri, 5 - 07 Ocak 2021, ss.42

### **39. Spherical Fuzzy SWARA-MARCOS Approach for Green Supplier Selection**

Taş M. A., Çakır E., Ulukan H. Z.

6th International Conference on Recent Trends in Computer Science and Electronics January 5-7, 2021, University of Hawaii, USA, Hawaii, Amerika Birleşik Devletleri, 5 - 07 Ocak 2021, ss.45

### **40. Bipolar Neutrosophic Fuzzy Dijkstra Algorithm and Its Application**

ÇAKIR E., ULUKAN H. Z.

International Conference on Intelligent and Fuzzy Systems, INFUS 2020, İstanbul, Türkiye, 21 - 23 Temmuz 2020, ss.311-318

### **41. Shortest Fuzzy Hamiltonian Cycle on Transportation Network Using Minimum Vertex Degree and Time-dependent Dijkstra's Algorithm**

ÇAKIR E., Ulukan Z., ACARMAN T.

16th IFAC Symposium on Control in Transportation Systems CTS 2021, Lille, Fransa, 8 - 10 Haziran 2021, cilt.54, ss.348-353

### **42. A\* Algorithm Under Single-Valued Neutrosophic Fuzzy Environment**

ÇAKIR E., ULUKAN H. Z.

International Conference on Intelligent and Fuzzy Systems, INFUS 2020, İstanbul, Türkiye, 21 - 23 Temmuz 2020,

ss.302-310

43. **Sustainable health tourism site selection with a fuzzy linguistic prolog**  
ÇAKIR E., ULUKAN H. Z.  
Developments of Artificial Intelligence Technologies in Computation and Robotics, Cologne, Germany, 18 - 21 Ağustos 2020, ss.1456-1463
44. **An interval type-2 fuzzy dynamic approach to replacement of server equipment**  
ÇAKIR E., ULUKAN H. Z.  
2020 IEEE International Conference on Fuzzy Systems, FUZZ 2020, Glasgow, Birleşik Krallık, 19 - 24 Temmuz 2020
45. **A Fuzzy Linguistic Programming for Sustainable Ecotourism Activities**  
Çakır E., Ulukan H. Z.  
IEEE CCWC 2020, Nevada, Amerika Birleşik Devletleri, 6 - 08 Ocak 2020, ss.121-126
46. **A S-QFD approach with bipolar fuzzy hamacher aggregation operators and its application on e-commerce**  
ÇAKIR E., ULUKAN H. Z.  
18th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems, IPMU 2020, Lisbon, Portekiz, 15 - 19 Haziran 2020, ss.577-587
47. **Interval Type-2 Fuzzy Reliability Modeling for Recycling Facility**  
Çakır E., Ulukan H. Z.  
2019 4th International Conference on System Reliability and Safety (ICSRS), Rome, İtalya, 20 - 22 Kasım 2019, ss.544-548
48. **A Fuzzy Logic Programming Environment for Recycling Facility Selection**  
Çakır E., Ulukan H. Z.  
11th International Joint Conference on Computational Intelligence, Vienna, Avusturya, 17 - 19 Eylül 2019, ss.367-374
49. **DUAL HESITANT PYTHAGOREAN FUZZY APPROACH FOR SUSTAINABLE ECOTOURISM SITE SELECTION**  
Çakır E., Ulukan H. Z.  
ICDSBA 2019: The 3rd Annual International Conference on Data Science and Business Analytics, İstanbul, Türkiye, 11 - 12 Ekim 2019, ss.296-301
50. **Fuzzy Multi-Objective Decision Making Approach For Nuclear Power Plant Installation**  
Çakır E., Ulukan H. Z.  
INFUS 2019, İstanbul, Türkiye, 23 - 25 Temmuz 2019, ss.1258-1265

## Metrikler

Yayın: 66

Atıf (Scopus): 31

H-İndeks (Scopus): 3

## Araştırma Alanları

Mühendislik ve Teknoloji

## Akademi Dışı Deneyim

Türk Hava Yolları