

ESRA ÇAKIR

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Address : Galatasaray üniversitesi endüstri mühendisliği

International Researcher IDs

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Publons / Web Of Science ResearcherID: AAB-6772-2020

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Yoksis Researcher ID: 282486



Learning Knowledge

Doctorate
2020 - 2024

Galatasaray University, Fen Bilimleri Enstitüsü, Turkey

Postgraduate
2017 - 2020

Galatasaray University, Fen Bilimleri Enstitüsü, Turkey

Undergraduate Double Major
2015 - 2018

Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği, Turkey

Undergraduate
2012 - 2017

Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Bilgisayar Mühendisliği, Turkey

Dissertations

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

Postgraduate, Multi-objective decision-making approach for nuclear power plant installation, Galatasaray University, Fen Bilimleri Enstitüsü, 2020

Academic Titles / Tasks

Research Assistant
2019 - Continues

Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği

Researcher
2024 - 2024

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

Researcher
2023 - 2024

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

Researcher
2022 - 2022

Université Pascal Paoli: Corse, Laboratory Sciences Pour l'Environnement, UMR
CNRS 6134 SPE, Group: "IT Simulation and Ubiquitous Systems"

Supported Projects

1. DEMİRCİOĞLU M. E., ULUKAN H. Z., ÇAKIR E., Project Supported by Higher Education Institutions, Industrial Engineering applications on Fuzzy Logic Environment, 2022 - 2023
2. ULUKAN H. Z., ÇAKIR E., Project Supported by Higher Education Institutions, Endüstri Mühendisliğinde Bulanık Küme Uygulamaları, 2020 - 2022

Published journal articles indexed by SCI, SSCI, and AHCI

1. **Vector-Based Preference Aided Ranking System (V-PARS): Application on Micromobility Modes in Paris**
Çakır E., Çağrı Tolga A. Ç.
IEEE Access, vol.12, pp.177533-177552, 2024 (SCI-Expanded)
2. **CIRCULAR INTUITIONISTIC FUZZY DECISION MAKING AND ITS APPLICATION**
Çakır E., Taş M. A.
EXPERT SYSTEMS WITH APPLICATIONS, vol.0, no.0, pp.1-34, 2023 (SCI-Expanded)
3. **Intuitionistic fuzzy multi-objective milk-run modelling under time window constraints**
Çakır E., Ulukan H. Z., Kahraman C., Ölçer Sağlam C., Kuleli Pak B., Pekcan B.
Journal Of Intelligent & Fuzzy Systems, vol.0, no.0, pp.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, vol.42, no.1, pp.227-236, 2022 (SCI-Expanded)
5. **Spherical bipolar fuzzy weighted multi-facility location modeling for mobile COVID-19 vaccination clinics**
Çakır E., Taş M. A., Ulukan H. Z.
Journal Of Intelligent & Fuzzy Systems, vol.0, no.0, pp.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, vol.23, no.4, pp.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, vol.39, no.5, pp.6339-6350, 2020 (SCI-Expanded)

Articles Published in Other Journals

1. **A Hybrid Machine Learning and Fuzzy Inference Approach with UAV for Indoor Virus Contamination Risk**
Çakır E., Erdi F., Demircioğlu M. E., Taş M. A.
International Journal of Engineering and Technology, vol.15, no.3, pp.94-99, 2023 (Peer-Reviewed Journal)
2. **Covid-19 Geçici Aşılama Kliniklerinin Atanmasına Sezgisel Bir Yaklaşım**
Çakır E., Taş M. A.
European Journal of Science and Technology, vol.34, pp.360-366, 2022 (Peer-Reviewed Journal)

3. **Circular Intuitionistic Fuzzy Multi-Criteria Decision Making Methodology**
Çakır E., Taş M. A.
Avrupa Bilim ve Teknoloji Dergisi, no.28, pp.900-905, 2021 (Peer-Reviewed Journal)
4. **Green Supplier Selection Using Game Theory Based on Fuzzy SWARA**
Taş M. A., Çakır E.
Sakarya Üniversitesi Fen Bilimleri Enstitüsü Dergisi, pp.1-14, 2021 (Peer-Reviewed Journal)
5. **SPHERICAL FUZZY SWARA-MARCOS APPROACH FOR GREEN SUPPLIER SELECTION**
Taş M. A., Çakır E., Ulukan H. Z.
3C Tecnología, pp.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, pp.53-65, 2021 (ESCI)
7. **RELIABILITY ANALYSIS WITH SPHERICAL FUZZY SETS**
Çakır E., Ulukan H. Z.
Mühendislik ve Tasarım Bilimleri Dergisi, vol.9, no.1, pp.230-239, 2021 (Peer-Reviewed Journal)

Books & Book Chapters

1. **A Hybrid Fuzzy MCDM Approach for Sustainable Health Tourism Sites Evaluation**
Taş M. A., Çakır E.
in: Handbook of Research on Advances and Applications of Fuzzy Sets and Logic, Said Broumi, Editor, IGI Global, Tunis, pp.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.
in: Intelligent and Fuzzy Techniques in Aviation 4.0, Kahraman C., Aydın S., Editor, Springer, London/Berlin , London, pp.123-146, 2022

Refereed Congress / Symposium Publications in Proceedings

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, Egypt, 17 - 19 December 2024, pp.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, Italy, 18 - 20 September 2024, pp.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, Hungary, 22 - 27 May 2024, pp.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, Turkey, 16 - 18 July 2024, pp.1-8
5. **Micromobility Evaluation in Istanbul: A Critical Review**
Çakır E.
3rd International Graduate Research Symposium (IGRS'24), İstanbul, Turkey, 8 - 10 May 2024, pp.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, Denmark, 30 June - 03 July 2024, pp.1
7. **Circular Intuitionistic Fuzzy AHP for Micromobility Evaluation**
Çakır E.
27TH INTERNATIONAL CONFERENCE ON MULTIPLE CRITERIA DECISION MAKING (MCDM2024), Tunis, Tunisia, 2 - 07 June 2024, pp.1
8. **Fuzzy Extracted Framework Element Effect (Fuzzy-EFEE) Methodology**
Çakır E.
27TH INTERNATIONAL CONFERENCE ON MULTIPLE CRITERIA DECISION MAKING (MCDM2024), Tunis, Tunisia, 2 - 07 June 2024, pp.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, United States Of America, 03 May 2024, pp.195-199
10. **Micromobility Evolution of İstanbul**
Çakır E.
13.Ulusal Lojistik ve Tedarik Zinciri Kongresi (ULTZK 2024), Afyonkarahisar, Turkey, 16 - 18 May 2024, pp.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, France, 2 - 04 May 2024, pp.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, Italy, 18 September 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, Romania, 22 - 24 March 2023, pp.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, Mexico, 5 - 08 December 2023, vol.1, pp.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, France, 24 October 2023, pp.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, Singapore, 25 - 27 February 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, Turkey, 22 - 24 August 2023, pp.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, Singapore, 13 - 15 January 2023, pp.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 December 2022, pp.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, Turkey, 7 - 09 September 2022, pp.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, Turkey, 20 - 21 October 2022, pp.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, Canada, 31 May - 03 June 2022, pp.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, Turkey, 01 July 2022, pp.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, Italy, 11 - 15 July 2022, pp.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, Hungary, 18 - 20 November 2021, pp.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, Turkey, 21 - 22 October 2021, pp.1
27. **Neutrosophic Fuzzy MARCOS Approach for Sustainable Hybrid Electric Vehicle Assessment**
Çakır E., Taş M. A., Ulukan H. Z.
IEEE SMC 2021, Melbourne, Australia, 17 - 20 October 2021, pp.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, Italy, 6 - 09 September 2021, pp.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, Turkey, 24 - 26 August 2021, vol.307, pp.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, Turkey, 23 - 24 August 2021, pp.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, Turkey, 24 - 26 August 2021, vol.308, pp.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, Luxembourg, 11 - 14 July 2021, pp.1-6
33. **COVID-19 Geçici Test Laboratuvarları Yerleşimi İçin Bulanık Tabanlı Tasarruf Algoritması**
Çakır E., Taş M. A., Ulukan H. Z.
40. Yöneyem Araştırması - Endüstri Mühendisliği Kongresi (YAEM 2021), İstanbul, Turkey, 4 - 07 July 2021, pp.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. Yöneyem Araştırması - Endüstri Mühendisliği Kongresi (YAEM 2021), İstanbul, Turkey, 4 - 07 July 2021, pp.19
35. **Fuzzy Linguistic Prolog on Route Prioritisation**
Çakır E.
29th Signal Processing and Communications Applications Conference (SIU 2021), İstanbul, Turkey, 9 - 11 June 2021, pp.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, United States Of America, 29 - 30 April 2021, pp.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, United States Of America, 27 - 30 January 2021, pp.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, United States Of America, 5 - 07 January 2021, pp.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, United States Of America, 5 - 07 January 2021, pp.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, Turkey, 21 - 23 July 2020, pp.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, France, 8 - 10 June 2021, vol.54, pp.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, Turkey, 21 - 23 July 2020,

pp.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 August 2020, pp.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, United Kingdom, 19 - 24 July 2020
45. **A Fuzzy Linguistic Programming for Sustainable Ecotourism Activities**
Çakır E., Ulukan H. Z.
IEEE CCWC 2020, Nevada, United States Of America, 6 - 08 January 2020, pp.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, Portugal, 15 - 19 June 2020, pp.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, Italy, 20 - 22 November 2019, pp.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, Austria, 17 - 19 September 2019, pp.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, Turkey, 11 - 12 October 2019, pp.296-301
50. **Fuzzy Multi-Objective Decision Making Approach For Nuclear Power Plant Installation**
Çakır E., Ulukan H. Z.
INFUS 2019, İstanbul, Turkey, 23 - 25 July 2019, pp.1258-1265

Metrics

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Research Areas

Engineering and Technology

Non Academic Experience

Türk Hava Yolları