

## Asst. Prof. SERKAN AKBAŞ

### Personal Information

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### International Researcher IDs

ORCID: 0000-0001-5220-7458

ScopusID: 57207549484

Yoksis Researcher ID: 223482

### Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Statistics and Computer Science, Turkey 2015 - 2022

Postgraduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Statistics and Computer Science, Turkey 2011 - 2015

Postgraduate, Eszterhazy Karoly College, Program Design And Informatics, Program Design And Informatics, Hungary 2013 - 2014

Undergraduate, Ondokuz Mayıs University, Fen Edebiyat Fakültesi, İstatistik, Turkey 2007 - 2011

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Education Management and Planning, Araştırmalarda Farkındalık ve Odaklanma, TÜBİTAK ULAKBİM ve EBSCO, 2014

Quality Management, Kalite Yönetim Sistemi Dokümantasyon Şartları ve İç Tetkik Eğitimi, ISOSER DANIŞMANLIK EĞİTİM ve KALİBRASYON MERKEZİ, 2011

### Dissertations

Doctorate, Fuzzy Logic Based Solutions For Multi Criteria Decision Making Problems and Its Application to Portfolio Selection, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Statistics and Computer Science, 2022

Postgraduate, Bulanık Çok Ölçütlü Programlama Probleminin AHP'ye Dayalı Çözümü, Karadeniz Technical University, -, İstatistik ve Bilgisayar Bilimleri, 2014

### Research Areas

Operational Research, Statistics, Statistical Analysis and Applications, Natural Sciences

## Academic Titles / Tasks

Assistant Professor, Karadeniz Technical University, Fen Fakültesi, Bilgisayar Bilimleri, 2023 - Continues

Research Assistant, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Statistics and Computer Science, 2014 - 2023

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

- I. **A Study on Portfolio Selection Based on Fuzzy Linear Programming**  
AKBAŞ S., ERBAY DALKILIÇ T., Aksoy T. G.  
INTERNATIONAL JOURNAL OF UNCERTAINTY FUZZINESS AND KNOWLEDGE-BASED SYSTEMS, vol.30, no.02, pp.211-230, 2022 (SCI-Expanded)
- II. **A hybrid algorithm for portfolio selection: An application on the Dow Jones Index (DJI)**  
AKBAŞ S., ERBAY DALKILIÇ T.  
Journal of Computational and Applied Mathematics, vol.398, 2021 (SCI-Expanded)
- III. **Evaluation of trapezoidal fuzzy numbers on AHP based solution of multi-objective programming problems**  
Akbaş S., Dalkilic T.  
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.31, no.3, pp.1869-1879, 2016 (SCI-Expanded)

## Articles Published in Other Journals

- I. **YAMUK BULANIK SAYILARA DAYALI DOGRUSAL PROGRAMLAMA ILE PORTFOY OPTIMIZASYONU**  
AKBAŞ S., ERBAY DALKILIÇ T.  
JOURNAL OF MEHMET AKIF ERSOY UNIVERSITY ECONOMICS AND ADMINISTRATIVE SCIENCES FACULTY, vol.6, no.3, pp.634-650, 2019 (ESCI)
- II. **DECISION MAKING FOR PORTFOLIO SELECTION BY FUZZY MULTI CRITERIA LINEAR PROGRAMMING**  
AKBAŞ S., ERBAY DALKILIÇ T.  
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.68, no.2, pp.2238-2257, 2019 (ESCI)
- III. **Multi-Criteria Supplier Selection Based on Fuzzy Pairwise Comparison in AHP**  
AKBAŞ S., ERBAY DALKILIÇ T.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.31, no.1, pp.296-308, 2018 (ESCI)
- IV. **Analytic Hierarchy Process Using Trapezoidal Fuzzy Number Based Weights for Portfolio Selection.**  
Akbaş S., Erbay Dalkılıç T.  
International Journal of Engineering Science Invention, vol.6, no.12, pp.26-31, 2017 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Linear Optimization Approaches for Public Transport Systems**  
Siyah B., Akbaş S., Berber T.  
XXI. International Symposium on Econometrics, Operational Research and Statistics, Çanakkale, Turkey, 8 - 10 September 2021, no.51372, pp.76-79
- II. **Portfolio Optimization with Linear Programming Based on Trapezoidal Fuzzy Numbers**  
AKBAŞ S., ERBAY DALKILIÇ T.  
19. Uluslararası Ekonometri, Yöneylem Araştırması ve İstatistik Sempozyumu 2018, Antalya, Turkey, 17 - 20 October 2018, pp.432-435
- III. **Portfolio Selection By Fuzzy Linear Programming**  
AKBAŞ S., ERBAY DALKILIÇ T.  
5th INTERNATIONAL CONFERENCE ON RECENT ADVANCES IN PURE AND APPLIED MATHEMATICS, Trabzon, Turkey, 23 - 27 July 2018, pp.19

- IV. **Determining Unnecessary Test Orders in Biochemistry Laboratories: A Case Study for Thyroid Hormone Tests**  
AKBAŞ Y., AKBAŞ S., BERBER T.  
10th International Statistics Congress, Ankara, Turkey, 6 - 08 December 2017, pp.219
- V. **Determining Unnecessary Test Orders in Biochemistry Laboratories: A Case Study for Thyroid Hormone Tests**  
AKBAŞ Y., AKBAŞ S., BERBER T.  
10th International Statistics Congress, Ankara, Turkey, 6 - 08 December 2017, pp.219
- VI. **Fuzzy Multi Criteria Decision Making Approach for Portfolio Selection**  
AKBAŞ S., ERBAY DALKILIÇ T.  
10th International Statistics Congress, Ankara, Turkey, 6 - 08 December 2017, pp.45
- VII. **Analytic Hierarchy Process Using Trapezoidal Fuzzy Number Based Weights for Portfolio Selection**  
AKBAŞ S., ERBAY DALKILIÇ T.  
International Conference on Computational and Statistical Methods in Applied Sciences, Samsun, Turkey, 9 - 11 November 2017, pp.99-100
- VIII. **Association Analysis Method for Determining Unnecessary Test Orders and Effective Use of HBA1C Test**  
AKBAŞ Y., AKBAŞ S., BERBER T.  
International Conference on Computational and Statistical Methods in Applied Sciences 2017, Samsun, Turkey, 9 - 11 November 2017, pp.244-245
- IX. **Analytic Hierarchy Process Using Trapezoidal Fuzzy Number Based Weights for Portfolio Selection**  
AKBAŞ S., ERBAY DALKILIÇ T.  
International Conference on Computational and Statistical Methods in Applied Sciences 2017, Samsun, Turkey, 9 - 11 November 2017, pp.99
- X. **Tedarikçi Seçimi İçin Bulanık Mantığa Dayalı Bir Algoritma**  
AKBAŞ S., ERBAY DALKILIÇ T.  
XVIII. Uluslararası Ekonometri, Yöneylem Araştırması ve İstatistik Sempozyumu, Trabzon, Turkey, 5 - 07 October 2017, pp.345
- XI. **Biyokimya Laboratuvarı Test İstemlerinin Etkin Kullanımının Birliktelik Analizi Yöntemi ile İncelenmesi**  
AKBAŞ Y., AKBAŞ S., BERBER T., ÖREM A.  
XVIII. Uluslararası Ekonometri, Yöneylem Araştırması ve İstatistik Sempozyumu 2017, Trabzon, Turkey, 5 - 07 October 2017, pp.420
- XII. **Çok Ölçütlü Programlama Problemlerinin Yamuk Bulanık Sayıya Dayalı Çözümü**  
AKBAŞ S., ERBAY DALKILIÇ T.  
10th International Statistics Days Conference, Giresun, Turkey, 7 - 09 October 2016, pp.121-123
- XIII. **Solving Multi-Objective Programming Problem Based Triangular Fuzzy Number**  
ERBAY DALKILIÇ T., Akbaş S.  
Uluslararası 9. İstatistik Kongresi, Antalya, Turkey, 29 October - 01 November 2015, pp.269-270
- XIV. **Solving Fuzzy Multi-objective Linear Programming Based Fuzzy AHP**  
ERBAY DALKILIÇ T., AKBAŞ S.  
9th International Statistics Day Symposium 2014, Antalya, Turkey, 10 - 14 May 2014, pp.113

## Supported Projects

BERBER T., ŞEVİK U., AKBAŞ S., YEGİNOĞLU Y., ÖREM A., TAT M., Project Supported by Higher Education Institutions, Veri Madenciliği Yöntemleri Aracılığı ile Laboratuvar Testlerinin İstem-Gereklik İlişkisinin Belirlenmesi, 2016 - 2018

## **Metrics**

Publication: 22

Citation (WoS): 14

Citation (Scopus): 17

H-Index (WoS): 3

H-Index (Scopus): 3

## **Congress and Symposium Activities**

XXI. International Symposium on Econometrics, Operational Research and Statistics (ISEOS2021), Attendee, Çanakkale, Turkey, 2021

XIX. International Symposium on Econometrics Operations Research and Statistics (ISEOS2018), Attendee, Antalya, Turkey, 2018

5th International Conference on Recent Advances in Pure and Applied Mathematics (ICRAPAM 2018), Attendee, Trabzon, Turkey, 2018

10th International Statistics Congress (ISTKON 2017), Attendee, Ankara, Turkey, 2017

International Conference on Computational and Statistical Methods in Applied Sciences (COSTAS 2017), Attendee, Samsun, Turkey, 2017

XVIII. International Symposium on Econometrics Operations Research and Statistics (ISEOS2017), Attendee, Trabzon, Turkey, 2017

10th International Statistics Days Conference (ISDC 2016), Attendee, Giresun, Turkey, 2016

9th International Statistics Congress (ISTKON 2015), Attendee, Antalya, Turkey, 2015

IX. International Statistics Day Symposium (ISDC 2014), Attendee, Antalya, Turkey, 2014