

## Asst. Prof. KADRIYE FİLİZ BALBAL

### Personal Information

**Email:** kadriyefiliz.balbal@deu.edu.tr

**Other Email:** kfbalbal@gmail.com

**Web:** <https://avesis.deu.edu.tr/kadriyefiliz.balbal>

### International Researcher IDs

ScholarID: mC4vph0AAAAJ

ORCID: 0000-0002-7215-9964

Publons / Web Of Science ResearcherID: JAD-2097-2023

ScopusID: 57190163684

Yoksis Researcher ID: 378570

### Education Information

Doctorate, Manisa Celal Bayar University, Institute Of Science, Matematik (DR), Turkey 2017 - 2020

Postgraduate, Ege University, Fen Bilimleri Enstitüsü, Bilgisayar ve Öğretim Teknolojileri Eğitimi (Ders Aşaması Tamamlandı), Turkey 2014 - 2017

Postgraduate, Manisa Celal Bayar University, Faculty Of Arts And Sciences, Department Of Mathematics, Turkey 2014 - 2016

Undergraduate, Balıkesir University, Necatibey Faculty Of Education, Department Of Mathematics And Science Teaching, Turkey 1996 - 2000

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Programlamaya yönelik mobil oyun geliştirilmesi ve bulanık mantık tabanlı android uygulama ile tutumun incelenmesi, Manisa Celal Bayar University, Institute Of Science, 2020

Postgraduate, Honey & Mumford ve Mccarthy öğrenme stili modellerinin bulanık mantık tabanlı gerçekleştirimi ve performans analizi, Manisa Celal Bayar University, Institute Of Science, 2016

### Research Areas

Computer Sciences, Artificial Intelligence, Computer Learning and Pattern Recognition, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Dokuz Eylül University, Fen Fakültesi, Bilgisayar Bilimleri Bölümü, 2022 - Continues

Visiting Lecturer, Izmir University Of Economics, Vocational School, Department Of Computer Technologies, 2021 - 2022

## Academic and Administrative Experience

Faculty Management Board Member, Dokuz Eylul University, Fen Fakültesi, Bilgisayar Bilimleri Bölümü, 2024 - Continues  
Bilgisayar Bilimleri ve Yapay Zeka Öğrenci Topluluğu Danışmanlığı, Dokuz Eylul University, Fen Fakültesi, Bilgisayar Bilimleri Bölümü, 2023 - Continues

Deputy Head of Department, Dokuz Eylul University, Fen Fakültesi, Bilgisayar Bilimleri Bölümü, 2023 - 2024

Akademik Performans Komisyonu Üyesi, Dokuz Eylul University, Fen Fakültesi, Bilgisayar Bilimleri Bölümü, 2023 - 2024

Fakülte Sosyal Sorumluluk Komisyonu, Dokuz Eylul University, Fen Fakültesi, Bilgisayar Bilimleri Bölümü, 2023 - 2024

Bölüm Sosyal Sorumluluk Komisyonu, Dokuz Eylul University, Fen Fakültesi, Bilgisayar Bilimleri Bölümü, 2023 - 2024

Mezuniyet Komisyonu Üyesi, Dokuz Eylul University, Fen Fakültesi, Bilgisayar Bilimleri Bölümü, 2023 - 2024

Member of Department Strategic Planning Commission, Dokuz Eylul University, Fen Fakültesi, Bilgisayar Bilimleri Bölümü, 2022 - 2024

## Courses

Deep Learning and Convolutional Neural Networks, Postgraduate, 2023 - 2024

Machine Learning, Undergraduate, 2023 - 2024

Artificial Intelligence, Undergraduate, 2023 - 2024, 2022 - 2023

Bitirme Projesi, Undergraduate, 2023 - 2024, 2022 - 2023

Artificial Intelligence with Applications, Undergraduate, 2023 - 2024

Introduction to Mobile Programming, Undergraduate, 2023 - 2024

Special Topics in Computational Linguistics and Intelligent Text Processing, Postgraduate, 2023 - 2024

Ofis Programları ile Rapor ve Sunum Hazırlama, Undergraduate, 2022 - 2023

Bilgi Teknolojileri ve Uygulamaları, Undergraduate, 2023 - 2024

Gönüllülük Çalışmaları, Undergraduate, 2023 - 2024

Bilgisayar Bilimlerine Giriş II, Undergraduate, 2022 - 2023

Computer Hardware, Associate Degree, 2021 - 2022

Mobile Applications and Technologies, Associate Degree, 2021 - 2022

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

- I. **A Novel Classification Method: Neighborhood-Based Positive Unlabeled Learning Using Decision Tree (NPULUD)**  
Ghasemkhani B., Balbal K. F., Birant K. U., Birant D.  
ENTROPY, vol.26, no.5, pp.1-21, 2024 (SCI-Expanded)
- II. **Location-Based housing valuation index proposal: Izmir example**  
Nasiboğlu R., Balbal K. F., Rusman M. S., Nasiboğlu E.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.40, no.1, pp.189-201, 2024 (SCI-Expanded)
- III. **Improving Turkish Text Sentiment Classification through Task-Specific and Universal Transformations: An Ensemble Data Augmentation Approach**  
Onan A., Balbal K. F.  
IEEE Access, 2024 (SCI-Expanded)
- IV. **Mobile devices use in analyzing the engineering students attitude towards programming by using a fuzzy logic technique**  
Ozdemir A., Balbal K. F., Senel B. C.  
COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, vol.29, no.3, pp.538-549, 2021 (SCI-Expanded)
- V. **Fuzzy logic based performance analysis of educational mobile game for engineering students**  
Ozdemir A., Balbal K. F.

COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, vol.28, no.6, pp.1536-1548, 2020 (SCI-Expanded)

**VI. Performance Evaluation of Learning Styles Based on Fuzzy Logic Inference System**

Ozdemir A., Alaybeyoglu A., Mulayim N., Balbal K. F.

COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, vol.24, no.6, pp.853-865, 2016 (SCI-Expanded)

## Articles Published in Other Journals

**I. Time Series Forecasting of Solar Energy Production Data Using LSTM**

Balbal K. F., Çelik Ö., İkikardeş S.

Journal of Artificial Intelligence and Data Science (JAIDA), vol.3, no.2, pp.116-123, 2023 (Peer-Reviewed Journal)

**II. EVALUATION OF SOLAR POWER FORECASTING USING DEEP LEARNING: A CASE STUDY IN İZMİR, TURKIYE**

Balbal K. F., Çelik Ö., İkikardeş S.

Journal of Modern Technology and Engineering, vol.3, no.8, pp.165-188, 2023 (Peer-Reviewed Journal)

## Books & Book Chapters

**I. A Design Of Educational Computer Game**

Özdemir A., Alaybeyoğlu A., Balbal K. F.

in: Research Highlights in Education and Science 2017, Dr. Mustafa Pehlivan, Dr. Wenxia Wu, Editor, ISRES Publishing, Konya, pp.114-120, 2017

**II. BULANIK MANTIK TABANLI ÖĞRENME STİLİ BELİRLEME SİSTEMİ: Honey&Mumford Ve Mccarthy Öğrenme Stilleri**

BALBAL K. F., ÖZDEMİR A., ALAYBEYOĞLU SOY A.

LAP LAMBERT Academic Publishing, 2016

## Refereed Congress / Symposium Publications in Proceedings

**I. The Effect of Feature on Movie Recommendation Methods**

Yağcı B., Balbal K. F., Kuruoğlu Kandemir E.

4 th International Artificial Intelligence and Data Science Congress, İzmir, Turkey, 14 - 15 March 2024, pp.26

**II. LSTM-BASED SOLAR POWER FORECASTING**

Balbal K. F., İkikardeş S., Çelik Ö.

INTERNATIONAL ANKARA CONGRESS ON MULTIDISCIPLINARY STUDIES-VI, Ankara, Turkey, 13 - 14 October 2023, pp.1444-1445

**III. Machine Learning Based Heart Failure Diagnosis**

İşler E., Gavaş R., Balbal K. F.

III. International Artificial Intelligence And Data Science Congress (ICADA'23), İzmir, Turkey, 28 July 2023, pp.7

**IV. MAKİNE ÖĞRENMESİ YÖNTEMLERİ İLE TUTUMUNTAHMİN EDİLMESİ**

Balbal K. F.

2nd International Conference on Artificial Intelligence and Data Science, İzmir, Turkey, 17 June 2022, pp.50-53

**V. TUTUMUN BULANIK MANTIK VE KLASİK MANTIK YÖNTEMLERİYLE DEĞERLENDİRİLİP KARŞILAŞTIRILMASI**

ÖZDEMİR A., BALBAL K. F.

3rd INTERNATIONAL BILTEK CONFERENCE ON SCIENCE, TECHNOLOGY & CURRENT DEVELOPMENTS IN SOCIAL SCIENCES, Adana, Turkey, 19 June 2020

**VI. A DESIGN OF FUZZY LOGIC-BASED ATTITUDE DETERMINATION SYSTEM**

Özdemir A., Alaybeyoğlu A., Balbal K. F.

International Conference on Mathematics and Mathematics Education (ICMME 2019), Konya, Turkey, 11 - 13 July 2019, pp.205-206

**VII. ANALYSIS OF GRADUATE THESIS MADE IN TURKEY ON MOBILE APPLICATIONS**

ÖZDEMİR A., ALAYBEYOĞLU SOY A., BALBAL K. F.

International Conference on Mathematics and Mathematics Education (ICMME 2019), Konya, Turkey, 11 - 13 July 2019

**VIII. EĞİTİMDE MOBİL UYGULAMALAR**

ÖZDEMİR A., ALAYBEYOĞLU SOY A., BALBAL K. F.

VIII. International Congress on Research in Education (ICRE), Manisa, Turkey, 09 May 2018, pp.68

**IX. EĞİTSEL MOBİL UYGULAMA TASARIMI**

ÖZDEMİR A., BALBAL K. F.

2nd International Students Science Congress, İzmir, Turkey, 04 May 2018, pp.36-39

**X. DETERMINATION OF ATTITUDES OF ENGINEERING STUDENTS TOWARDS MOBILE LEARNING**

ÖZDEMİR A., ALAYBEYOĞLU SOY A., BALBAL K. F.

International Conference on Education in Mathematics, Science & Technology (ICEMST), MARMARİS, Turkey, 28 April 2018, pp.117

**XI. FUZZY LOGIC APPLICATIONS IN THE FIELD OF EDUCATION**

ÖZDEMİR A., ALAYBEYOĞLU SOY A., BALBAL K. F.

International Conference on Education in Mathematics, Science & Technology (ICEMST), MARMARİS, Turkey, 28 April 2018, pp.116

**XII. A DESIGN OF IMAGE COMPRESSION SYSTEM FOR MOBILE DEVICES,**

ALAYBEYOĞLU SOY A., ÖZDEMİR A., GÜNGÖR Ö., BALBAL K. F.

International Conference on Research in Education and Science (ICRES), KUŞADASI, Turkey, 18 May 2017

**XIII. A DESIGN OF ANDROID BASED CHECK-LIST FOR INCREASING FLIGHT SAFETY AND REDUCING AIRCRAFT ACCIDENTS**

ALAYBEYOĞLU SOY A., ÖZDEMİR A., İNCEKAŞ H., BALBAL K. F.

International Conference on Research in Education and Science (ICRES), KUŞADASI, Turkey, 18 May 2017, pp.801-806

**XIV. A FUZZY LOGIC APPROACH FOR BORDER SECURITY**

YAŞAR F. G., ALAYBEYOĞLU SOY A., ÖZDEMİR A., BALBAL K. F.

International Conference on Research in Education and Science (ICRES), 2016, BODRUM, Turkey, 19 May 2016, pp.68-75

**XV. FUZZY LOGIC BASED MCCARTHY LEARNING STYLE INFERENCE SYSTEM**

BALBAL K. F., MÜLAYİM N., ÖZDEMİR A., ALAYBEYOĞLU SOY A.

International Conference on Education in Mathematics, Science & Technology (ICEMST), BODRUM, Turkey, 19 May 2016, pp.657-664

**XVI. FUZZY LOGIC BASED DOOR LOCK-RELEASE CONTROL SYSTEM FOR METRO SYSTEMS**

ÖZDEMİR A., ALAYBEYOĞLU SOY A., BALBAL K. F., MÜFTÜOĞLU T. D.

International Conference on Research in Education and Science (ICRES), 2016, BODRUM, Turkey, 19 May 2016, pp.76-81

**XVII. A LEARNING STYLE INFERENCE SYSTEM BASED ON FUZZY LOGIC TECHNIQUE**

UYSAL M., BALBAL K. F., MÜLAYİM N., ÖZDEMİR A., ALAYBEYOĞLU SOY A.

International Conference on Education in Mathematics, Science & Technology (ICEMST) 2016, BODRUM, Turkey, 19 - 22 May 2016, pp.665-672

**XVIII. AKILLI TELEFONLAR İÇİN KULLANILABİLİRLİK ÇALIŞMASI: LİSE ÖRNEĞİ**

İNCEOĞLU M. M., BALBAL K. F.

3rd. International Conference on New Trends in Education (ICNTE), 2016, İzmir, Turkey, 26 April 2016, pp.3

**XIX. A LEARNING STYLE INFERENCE SYSTEM BASED ON FUZZY LOGIC TECHNIQUE AND**

**HONEY&MUMFORD'S LEARNING MODEL**

BALBAL K. F., MÜLAYİM N., ÖZDEMİR A., ALAYBEYOĞLU SOY A.

International Conference on Education in Mathematics, Science & Technology (ICEMST), 2015, Antalya,

Turkey, 23 April 2015

**XX. BULANIK MANTIK TABANLI UÇAK MODELİ TESPİTİ**

FİDAN H., ÇINARLI V., UYSAL M., BALBAL K. F., ÖZDEMİR A., ALAYBEYOĞLU SOY A.

XVII. AKADEMİK BİLİŞİM KONFERANSI -- AB 2015, Eskişehir, Turkey, 04 February 2015

## **Activities in Scientific Journals**

Journal of Artificial Intelligence and Data Science (JAIDA), Committee Member, 2023 - Continues

## **Scientific Refereeing**

COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, Journal Indexed in SCI-E, July 2023

3rd International Artificial Intelligence and Data Science Congress, Conference Paper (Abstract), June 2023

3rd International Artificial Intelligence and Data Science Congress, Conference Paper (Abstract), June 2023

COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, Journal Indexed in SCI-E, March 2023

Kuramsal Eğitim Bilim Dergisi, Other Indexed Journal, March 2023

Sakarya University Journal of Computer and Information Sciences (Online), Other Indexed Journal, May 2022

COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, Journal Indexed in SCI-E, May 2020

## **Tasks In Event Organizations**

Balbal K. F., III. INTERNATIONAL ARTIFICIAL INTELLIGENCE AND DATA SCIENCE CONGRESS, Scientific Congress, İzmir, Turkey, Temmuz 2023

Balbal K. F., III. INTERNATIONAL ARTIFICIAL INTELLIGENCE AND DATA SCIENCE CONGRESS, Scientific Congress, İzmir, Turkey, Haziran 2022

## **Congress and Symposium Activities**

Attendee, İzmir, Turkey, 2023