



Lect. FURKAN BALCI

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: ABD-8353-2021

ScopusID: 58117015100

Yoksis Researcher ID: 328672



Education Information

2023 - Continues	Postgraduate, Hoca Ahmet Yesevi Türk Kazak Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği, Kazakhstan
2023 - Continues	Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Turkey
2016 - 2022	Associate Degree, Anadolu University, Open Education Faculty, Department Of Foreign Trade, Turkey
2018 - 2020	Postgraduate, Nuh Naci Yazgan University, Institute Of Science, Elektrik-Elektronik Mühendisliği (YI) (Tezli), Turkey
2015 - 2018	Undergraduate, Erciyes University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Turkey

Dissertations

2020	Uzun kısa süreli bellek algoritması kullanılarak eeg tabanlı kimliklendirme sistemi tasarımı, Nuh Naci Yazgan University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği (YI) (Tezli), Postgraduate
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Research Areas

Computer Sciences, Biomedical Engineering, Electrical and Electronics Engineering, Engineering and Technology

Academic Titles / Tasks

2020 - Continues	Lecturer, Gazi University, Teknoloji Fakültesi, Elektrik - Elektronik Mühendisliği
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Courses

2021 - 2022	Elektronik Lab-II, Undergraduate
2021 - 2022	Haberleşme Sistemleri Lab-II, Undergraduate

2021 - 2022	Haberleşme Sistemleri Lab, Undergraduate
2021 - 2022	Sayısal Tasarım Lab, Undergraduate
2020 - 2021	Elektronik Lab-I, Undergraduate
2020 - 2021	Devre Analizi Lab-I, Undergraduate

Taught Courses And Trainings

2022 - 2022	Balcı F., Python Programlama - 66. Dönem
2021 - 2022	Balcı F., Python Programlama - 65.Dönem
2021 - 2021	Balcı F., Python Programlama - 64. Dönem

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Hybrid Elmann BiLSTM Based Brain Tumor Classification on Augmented Data with Combination of Variational Auto-encoders and Generative Adversarial Network**
Balcı F.
TRAITEMENT DU SIGNAL, vol.41, no.2, pp.1-10, 2024 (SCI-Expanded)
- II. **Detection of melanoma with hybrid learning method by removing hair from dermoscopic images using image processing techniques and wavelet transform**
SUIÇMEZ Ç., KAHRAMAN H. T., Suicmez A., YILMAZ C., BALCI F.
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.84, 2023 (SCI-Expanded)
- III. **DM-EEGID: EEG-Based Biometric Authentication System Using Hybrid Attention-Based LSTM and MLP Algorithm**
BALCI F.
TRAITEMENT DU SIGNAL, vol.40, no.1, pp.65-79, 2023 (SCI-Expanded)

Articles Published in Other Journals

- I. **Faster R-CNN structure for computer vision- based road pavement distress detection**
Balci F., Yilmaz S.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, no.2, pp.701-710, 2023 (ESCI)
- II. **Improving the Prediction Accuracy in Deep Learning-based Cryptocurrency Price Prediction**
Balci F.
Academic Platform journal of engineering and smart systems (Online), vol.11, no.2, pp.1-16, 2023 (Peer-Reviewed Journal)
- III. **A Hybrid Attention-based LSTM-XGBoost Model for Detection of ECG-based Atrial Fibrillation**
Balci F.
Gazi University Journal of Science Part A: Engineering and Innovation, vol.8, pp.1-12, 2022 (Peer-Reviewed Journal)
- IV. **LSTM ile EEG Tabanlı Kimliklendirme Sistemi Tasarımı**
Balci F., Oralhan Z.
Avrupa Bilim ve Teknoloji Dergisi, vol.1, pp.135-141, 2020 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Performance of Machine Learning-Based Network Slicing Methods In 5G and Beyond Communication**
Balci F.
2 nd International Karatekin Science and Technology Conference, Çankırı, Turkey, 21 - 22 December 2023, pp.4-9
- II. **A Novel Attention-based LSTM-XGBoost Network for Classification of Atrial Fibrillation Signals**

Balcı F.

International Conference on Artificial Intelligence and Applied Mathematics in Engineering (ICAIAME 2022), Baku, Azerbaijan, 20 - 22 May 2022, pp.1-3

III. **Dispersion Entropy-based Fuzzy Classification for Motor Imagery Electroencephalogram**

Balcı F.

International Conference on Artificial Intelligence and Applied Mathematics in Engineering (ICAIAME 2022), Baku, Azerbaijan, 20 - 22 May 2022, pp.1-3

IV. **Classification Of Neurodegenerative Diseases With Hybrid Deep Learning And Machine Learning Method For Detection Using Gait Rhythm Signal**

Demirel A. N., Demir E., Alpağut B., Balcı F.

International Conference on Artificial Intelligence and Applied Mathematics in Engineering (ICAIAME 2022), Baku, Azerbaijan, 21 - 22 May 2022, pp.1-3

V. **EEG Based Identification System Design via LSTM**

BALCI F., ORALHAN Z.

Human-Computer Interaction, Optimization and Robotic Applications, Ankara, Turkey, 26 - 27 July 2020

Supported Projects

2022 - 2023	Lidar Ve Yapay Zekâ Tabanlı Düşman Tespitiyle Manyetik Fırlatıcının Hedeflendirilmesi, TUBITAK Project
2022 - 2023	Optimizasyon Algoritmaları Tabanlı Elektromanyetik Fırlatıcı Atış Sapması Optimizasyonu, TUBITAK Project
2022 - 2023	Otonom Sürüş İçin Derin Öğrenme-Makine Öğrenmesi Tabanlı Lidar Ve Görüntü Verileriyle Nesne Tespit Sisteminin Tasarlanması, TUBITAK Project
2022 - 2023	Yapay Zeka Tabanlı El Sırtı Damar Görüntüleriyle Biyometrik Kişi Tanımlama Sistemi, TUBITAK Project
2022 - 2023	Elektroensefalografi (EEG) İşaretiyle Yapay Zeka Tabanlı Kişi Kimlik Tespiti, TUBITAK Project

Activities in Scientific Journals

2021 - 2021	Gazi Üniversitesi Fen Bilimleri Dergisi Part: C Tasarım ve Teknoloji, Technical Redactor
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Scientific Refereeing

March 2023	International Journal of Automotive Science and Technology, Other Indexed Journal
June 2022	Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, Other Indexed Journal

Metrics

Publication: 12
Citation (WoS): 6
Citation (Scopus): 7
H-Index (WoS): 2
H-Index (Scopus): 1

Scholarships

2020 - Continues	2211 - Yurt İçi Lisansüstü Burs Programı, TUBITAK
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