Asst. Prof. MUHAMMET EMİN ŞAHİN

Personal Information

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Education Information

Doctorate, Firat University, Institute Of Scıence, Turkey 2015 - 2020

Research Areas

Engineering and Technology

Academic Titles / Tasks

Research Assistant, Yozgat Bozok University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2018 - Continues
Research Assistant, Firat University, Faculty Of Engıneerıng, Department Of Electrıcal And Electronıcs Engıneerıng, 2016 - Continues
Research Assistant, Yozgat Bozok University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2013 - 2016

Academic and Administrative Experience

Deputy Head of Department, Yozgat Bozok University, Mühendislik-Mimarlık Fakültesi, Bilgisayar Mühendisliği, 2021 - Continues

Courses

Yapay zeka, Undergraduate, 2022 - 2023
Görüntü işleme, Postgraduate, 2022 - 2023

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Sugar beet farming goes high-tech: a method for automated weed detection using machine learning and deep learning in precision agriculture**
ORTATAŞ F. N., Ozkaya U., ŞAHİN M. E., ULUTAŞ H.
Neural Computing and Applications, vol.36, no.9, pp.4603-4622, 2024 (SCI-Expanded)

II. **Classification of cucumber leaf diseases on images using innovative ensembles of deep neural networks**
ULUTAŞ H., Emin Sahin M.
Journal of Electronic Imaging, vol.32, no.5, 2023 (SCI-Expanded)

III. **Application of a novel deep learning technique using CT images for COVID-19 diagnosis on embedded systems**
ULUTAŞ H., ŞAHİN M., Karakus M. O.
Alexandria Engineering Journal, vol.74, pp.345-358, 2023 (SCI-Expanded)

IV. **Detection and classification of COVID-19 by using faster R-CNN and mask R-CNN on CT images**
ŞAHİN M., ULUTAŞ H., Yuce E., ERKOÇ M. F.
Neural Computing and Applications, vol.35, no.18, pp.13597-13611, 2023 (SCI-Expanded)

V. **Image processing and machine learning-based bone fracture detection and classification using X-ray images**
Şahin M. E.
INTERNATIONAL JOURNAL OF IMAGING SYSTEMS AND TECHNOLOGY, vol.0, no.0, pp.1-13, 2023 (SCI-Expanded)

VI. **Deep learning-based approach for detecting COVID-19 in chest X-rays**
Emin Sahin M. E.
Biomedical Signal Processing and Control, vol.78, 2022 (SCI-Expanded)

VII. **Design and Realization of a Hyperchaotic Memristive System for Communication System on FPGA**
ŞAHİN M. E., GÜLER H., HAMAMCI S. E.
TRAITEMENT DU SIGNAL, vol.37, no.6, pp.939-953, 2020 (SCI-Expanded)

VIII. **Design of a hyperchaotic memristive circuit based on wien bridge oscillator**
Sahin M. E., Demirkol A. S., GÜLER H., HAMAMCI S. E.
COMPUTERS & ELECTRICAL ENGINEERING, vol.88, 2020 (SCI-Expanded)

IX. **Application and Modeling of a Novel 4D Memristive Chaotic System for Communication Systems**
ŞAHİN M. E., ÇAM TAŞKIRAN Z. G., GÜLER H., HAMAMCI S. E.
CIRCUITS SYSTEMS AND SIGNAL PROCESSING, vol.39, no.7, pp.3320-3349, 2020 (SCI-Expanded)

X. **Simulation and implementation of memristive chaotic system and its application for communication systems**
Sahin M. E., Taskiran Z. G. C., Guler H., HAMAMCI S. E.
SENSORS AND ACTUATORS A-PHYSICAL, vol.290, pp.107-118, 2019 (SCI-Expanded)

Articles Published in Other Journals

I. **A deep learning-based technique for diagnosing retinal disease by using optical coherence tomography (OCT) images**
ŞAHİN M. E.
Firat Universitesi, 2022 (Peer-Reviewed Journal)

II. **A deep learning approach for detecting pneumonia in chest X-rays**
Şahin M. E., Ulutaş H., Yüce E.
Avrupa Bilim ve Teknoloji Dergisi, vol.28, pp.562-567, 2021 (Peer-Reviewed Journal)

III. **Memristor Based Filter Design and Implementation for ECG Signal**
ŞAHİN M. E., KARAKAYA B., GÜLER H., GÜLTEN A., HAMAMCI S. E.
Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, vol.9, no.2, pp.756-765, 2020 (Peer-Reviewed Journal)

IV. **An implementation of chaotic circuits with Multisim-LabVIEW**
ŞAHİN M. E., Bulut G. G., GÜLER H.
International Advanced Researches and Engineering Journal, vol.2, no.3, pp.304-308, 2018 (Peer-Reviewed Journal)

V. **Memristör Tabanlı Kaotik Devre Modelinin FPGA OrtamındaTasarımı ve Gerçeklenmesi**
KARAKAYA B., ŞAHİN M. E., GÜLER H., GÜLTEN A.

Fırat Üniversitesi Fen Bilimleri Dergisi, vol.29, no.2, pp.39-44, 2017 (Peer-Reviewed Journal)

VI. **TiO2 Memristor Modelling with LabVIEW**
ŞAHİN M. E., GÜLER H.
Turkish Journal of Science Technology, vol.12, no.2, pp.79-83, 2017 (Peer-Reviewed Journal)

VII. **LabVIEW Model Of Memristor With Nonlinear Dopant Drift**
ŞAHİN M. E., GÜLER H., KAYA T.
EUROPEAN JOURNAL OF TECHNIC, vol.6, no.2, pp.124-130, 2016 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. **A New Approach to Determine the Milk Lines of Silage Corn Using Image Processing Techniques**
Şahin M. E., Ulutaş H., Ortataş F. N.
8. Uluslararası Bilgisayar Bilimleri ve Mühendisliği Konferansı (UBMK 2023), Burdur, Turkey, 13 - 15 September 2023

II. **House Price Prediction Using Ensemble Learning Techniques**
ULUTAŞ H., ŞAHİN M. E.
2023: International Conference on Recent and Innovative Results in Engineering and Technology, Konya, Turkey, 16 - 18 August 2023, pp.103-108

III. **Classification of White Blood Cells Using Deep Learning Methods**
Şahin M. E., Yüce E.
10. Uluslararası Akademik Araştırmalar Kongresi , Ankara, Turkey, 27 January 2023, pp.95

IV. **Autonomous Mapping and Spraying in Precision Agriculture using Unmanned Ground Vehicles**
ORTATAŞ F. N., ULUTAŞ H., ŞAHİN M. E., Ciftci F.
2023 Innovations in Intelligent Systems and Applications Conference, ASYU 2023, Sivas, Turkey, 11 - 13 October 2023

V. **Memristor Based Chaotic Circuit Modelling With LabVIEW**
ŞAHİN M. E., KARAKAYA B., GÜLER H., GÜLTEN A.
International Advanced Researches Engineering Congress-2017, 16 - 18 November 2017

VI. **Memristor Based True Random Number Generator**
KARAKAYA B., ŞAHİN M. E., GÜLER H., GÜLTEN A.
6th International Conference on “Advances in Engineering and Technology” (AET-17), 2 - 04 May 2017

VII. **The Design of Memristor Based High Pass Filter Circuit**
Sahin M. E., Guler H.
24th IEEE International Conference on Electronics, Circuits and Systems (ICECS), Batumi, Georgia, 5 - 08 December 2017, pp.494-497

Supported Projects

Ulutaş H., Karakaya B., Şahin M. E., TUBITAK Project, Memristif Kaotik Devrelere Dayalı Görüntü Şifreleme Tekniği ve Gerçek Zamanlı Uygulaması, 2022 - 2024
Ulutaş H., Şahin M. E., Erkoç M. F., Project Supported by Higher Education Institutions, Yapay zeka teknikleri kullanılarak servikal intervertebral disk sinyal intensitesinin tespit edilmesi, 2023 - 2023
ŞAHİN M. E., Varol A., Project Supported by Higher Education Institutions, MAKİNE ÖĞRENİMİ ALGORİTMALARINI KULLANARAK HASTALIK TAHMİNİNİN GÖMÜLÜ SİSTEMLERDE GERÇEKLENMESİ, 2022 - 2022
ŞAHİN M. E., Project Supported by Higher Education Institutions, Memristör Tabanlı Aktif Filtre ve Kaotik Devrelerin LabVIEW Ortamında Gerçekleştirilmesi, 2016 - 2017
ŞAHİN M. E., Project Supported by Higher Education Institutions, EEG Sinyali Almak İçin Sistem Tasarımı, 2014 - 2015

Metrics

Publication: 32
Citation (WoS): 68
Citation (Scopus): 128
H-Index (WoS): 4
H-Index (Scopus): 6