Assoc. Prof. İsmail CANTÜRK

Personal Information

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International Researcher IDs
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Publons / Web Of Science ResearcherID: AAZ-7612-2020
Yoksis Researcher ID: 180278

Education Information

Doctorate, Yildiz Technical University, Elektrik Elektronik Fakültesi, Elektronik Ve Haberleşme Mühendisliği, Turkey 2012 - 2017
Postgraduate, Yildiz Technical University, Elektrik Elektronik Fakültesi, Elektronik Ve Haberleşme Mühendisliği, Turkey 2010 - 2012
Undergraduate, Eskisehir Osmangazi University, Mühendislik Mimarlık Fakültesi, Elektrik Elektronik Mühendisliği, Turkey 2005 - 2010

Research Areas

Biomedical Engineering, Biomedical Image Processing, Biosignal Processing, Biosignal Processing, Electrical and Electronics Engineering, Electronic, Electronic Circuits, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Yildiz Technical University, Faculty Of Electrical & Electronics, Biomedical Engineering, 2022 - Continues
Assistant Professor, Yildiz Technical University, Faculty Of Electrical & Electronics, Biomedical Engineering, 2020 - 2022
Research Assistant PhD, Yildiz Technical University, Faculty Of Electrical & Electronics, Electronics And Communication Engineering, 2017 - 2020
Research Assistant, Yildiz Technical University, Faculty Of Electrical & Electronics, Electronics And Communication Engineering, 2012 - 2017

Academic and Administrative Experience

Deputy Head of Department, Yildiz Technical University, Faculty Of Electrical & Electronics, Biomedical Engineering, 2022 - Continues

Courses

Graduation Thesis, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022
Analog Electronics, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021
Çok Disiplinli Tasarım Projesi, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022
Analog Electronic Applications, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Engineering Design, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022
Applied Machine Learning, Postgraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023
Introduction to Microcontroller Programming, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021
Biosignal Processing, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021
Electronic Circuits 1, Undergraduate, 2019 - 2020
Elektronik Devreler 1 Laboratuvarı, Undergraduate, 2019 - 2020, 2018 - 2019
Tasarım Projesi, Undergraduate, 2019 - 2020
Elektronik ve Haberleşme Mühendisliğine Giriş, Undergraduate, 2019 - 2020, 2018 - 2019
Bitime Çalışması, Undergraduate, 2019 - 2020
Elektronik Devreler 1, Undergraduate, 2018 - 2019
İleri Elektronik Uygulamaları, Undergraduate, 2019 - 2020
Basic Electronic Circuits, Undergraduate, 2017 - 2018
Yariletken Fiziği, Undergraduate, 2017 - 2018
İleri Elektronik Uygulamaları, Undergraduate, 2017 - 2018

Published journal articles indexed by SCI, SSCI, and AHCI

I. **A Deep Feature Driven Expert System to Estimate the Postmortem Interval From Corneal Opacity Development**
CANTÜRK İ., Özyılmaz L.
Expert Systems, vol.42, no.2, 2025 (SCI-Expanded)

II. **Temporal assessment of radiation exposure to uterus and ovaries in simulated scopy during hip fracture repair: A phantom study**
Günay O., Cantürk İ., Kekeç E., Aksoy S. H.
JOURNAL OF RADIATION RESEARCH AND APPLIED SCIENCIES, vol.17, no.3, pp.1-7, 2024 (SCI-Expanded)

III. **Investigation of Scalograms with a Deep Feature Fusion Approach for Detection of Parkinson's Disease**
Cantürk İ., Günay O.
COGNITIVE COMPUTATION, no.2024, pp.1-12, 2024 (SCI-Expanded)

IV. **A feature driven intelligent system for neurodegenerative disorder detection: An application on speech dataset for diagnosis of Parkinson's disease**
Cantürk İ.
International Journal On Artificial Intelligence Tools, vol.30, no.3, pp.1-12, 2021 (SCI-Expanded)

V. **A computerized method to assess Parkinson's disease severity from gait variability based on gender**
Cantürk İ.
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.66, no.2021, pp.1-8, 2021 (SCI-Expanded)

VI. **Fuzzy recurrence plot-based analysis of dynamic and static spiral tests of Parkinson's disease patients**
Cantürk İ.
Neural Computing & Applications, vol.33, no.1, pp.349-360, 2021 (SCI-Expanded)

VII. **Augmented Reality Based Simulation of Some Basic Electrical Circuits Which Requires Oscilloscope for Analysis without Hardware**
Özüağ M., Cantürk İ., Özyılmaz L.
JOURNAL OF CIRCUITS SYSTEMS AND COMPUTERS, vol.29, no.6, pp.1-11, 2020 (SCI-Expanded)

VIII. **A computational approach to estimate postmortem interval using opacity development of eye for**

human subjects
CANTÜRK İ., ÖZYILMAZ L.
COMPUTERS IN BIOLOGY AND MEDICINE, vol.98, pp.93-99, 2018 (SCI-Expanded)

IX. **Investigation of opacity development in the human eye for estimation of the postmortem interval**
CANTÜRK İ., çelik S., şahin M. F., Yagmur F., Kara S., Karabiber F.
BIOCYBERNETICS AND BIOMEDICAL ENGINEERING, vol.37, no.3, pp.559-565, 2017 (SCI-Expanded)

X. **A Machine Learning System for the Diagnosis of Parkinson's Disease from Speech Signals and Its Application to Multiple Speech Signal Types**
CANTÜRK İ., Karabiber F.
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.41, no.12, pp.5049-5059, 2016 (SCI-Expanded)

XI. **An experimental evaluation of electrical skin conductivity changes in postmortem interval and its assessment for time of death estimation**
CANTÜRK İ., Karabiber F., Celik S., Sahin M. F., Yagmur F., Kara S.
COMPUTERS IN BIOLOGY AND MEDICINE, vol.69, pp.92-96, 2016 (SCI-Expanded)

Articles Published in Other Journals

I. **Parkinson Hastalığının Derecesi ile Yürüyüş Değişkenliği Arasındaki İlişkinin Bulanık Tekrarlılık Grafiğine Göre Araştırılması**
Cantürk İ.
Avrupa Bilim ve Teknoloji Dergisi, vol.19, pp.410-419, 2020 (Peer-Reviewed Journal)

II. **DNA Microarray Gene Expression Data Classification Using SVM, MLP, and RF with Feature Selection Methods Relief and LASSO**
Güçkıran K., Cantürk İ., Özyılmaz L.
Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.23, no.1, pp.115-121, 2019 (Peer-Reviewed Journal)

III. **A New Perspective to Electrical Circuit Simulation with Augmented Reality**
ÖZÜAĞ M., CANTÜRK İ., ÖZYILMAZ L.
International Journal of Electrical and Electronic Engineering & Telecommunications., 2019 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. **Fine Tuning Approach on Scalogram Images to Detect a Neurological Disorder**
Cantürk İ.
International Conference on Engineering and Applied Natural Sciences, Konya, Turkey, 15 - 18 October 2022, pp.347-349

II. **Myocardial Infarction Complication Estimation with Feature Reduction**
Cantürk İ.
14th International Conference of Strategic Research on Scientific Studies and Education, Antalya, Turkey, 16 - 18 December 2021, pp.1-5

III. **Time Series Prediction for XU100 by Using A Long Short-term Memory Network**
Cantürk İ.
12th International Conference of Strategic Research on Scientific Studies and Education, 10 - 13 December 2020, pp.343-348

IV. **Performance comparison of shallow and deep CNNs for diagnosis of Parkinson's disease from gait variability**
Cantürk İ.
8th International Scientific Research Congress - Science and Engineering , Çorum, Turkey, 22 - 23 August 2020,

pp.183-187

V. **Bootloader design for an STM32 MCU over Ethernet by using TFTP protocol**
Cantürk B., Cantürk İ., Özyılmaz L.
3rd International Congress of Academic Research, Bolu, Turkey, 20 - 22 July 2020, pp.668-672

VI. **Gray Level Co-Occurrence Matrix Utilization for Predicting Severity of Parkinson's Disease from Gait Variability Based on Gender**
Cantürk İ.
IV. International Congress on New Trends in Science, Engineering and Technology, Sankt-Peterburg, Russia, 7 - 09 July 2020, pp.85-89

VII. **A Deep Learning-Cnn Based System For Medical Diagnosis: An Application On Parkinson'S Disease Handwriting Drawings**
KHATAMINO P., CANTÜRK İ., ÖZYILMAZ L.
6th International Conference on Control Engineering & Information Technology, İstanbul, Turkey, 25 October 2018

VIII. **Investigation Of Bone Age Assessment With Convolutional Neural Network By Using Dog Filtering And À Trous Wavelet As Preprocessing Techniques**
ASAD M. N., CANTÜRK İ., GENÇ F., ÖZYILMAZ L.
6th International Conference on Control Engineering & Information Technology, İstanbul, Turkey, 25 October 2018

IX. **Comparative Analog Circuit Design Automation Based on Multi Objective Evolutionary Algorithms an Application on CMOS Opamp**
CANTÜRK İ., KAHRAMAN N.
2015 38th International Conference on Telecommunications and Signal Processing (TSP), 9 - 11 July 2015

Supported Projects

GÜNAY O., ERSOY Ş., CANTÜRK İ., SERBES G., Project Supported by Higher Education Institutions, Kuzey Anadolu Fay Hattının İstanbulAvcılar Segmenti Civarında Radon Gaz Konsantrasyonları ile Sismik Aktiviteler Arasındaki İlişkinin Yapay Zeka İle Belirlenmesi, 2023 - Continues
Günay O., İçhedef M., Cantürk İ., Akkurt İ., Ersoy Ş., Yalçın C., Saç M., Taşköprü C., TUBITAK Project, Kuzey Anadolu Fay Zonunun İstanbul-Adalar Segmentindeki Anadolu ve Avrasya Levhalarında Radon Gaz Konsantrasyonları ile Sismik Aktiviteler Arasındaki İlişkinin Yapay Zeka ile Modellenmesi, 2023 - 2026
CANTÜRK İ., UZER B., Project Supported by Higher Education Institutions, Boyun Bölgesindeki Katater İşlemi İçin Kızılötesi Spektral Damar Görüntüleme ve Görüntü İşleme, 2024 - 2024
Cantürk İ., Dönmez Ö., Karataş D., Hamurcu Y. A., TUBITAK Project, Akıllı İnfüzyon Pompası (Smartdose), 2023 - 2024
GÜNAY O., YETKİN T., CANTÜRK İ., KEKEÇ E. İ., Project Supported by Higher Education Institutions, Skopi görüntülemede fetüsün maruz kaldığı kritik radyasyon doz süresinin belirlenmesi, 2023 - 2024
Cantürk İ., Çelik B., Demircioğlu İ., Örnek E. B., TUBITAK Project, Üç Farklı EMG Data Setinden Alınan Sinyallerin Makine Öğrenmesi Yöntemleriyle İşlenerek Biyonik Kollarda ve Rahabilitasyon Araçlarında Kullanılabilecek Model Oluşturulması, 2022 - 2023
Cantürk İ., TUBITAK Project, Makine Öğrenmesi Destekli Fiziksel Sağlık Uygulaması, 2021 - 2022
CANTÜRK İ., ÖZYILMAZ L., Project Supported by Higher Education Institutions, Derin öğrenme yöntemleri ile postmortem süre tahmini, 2021 - 2022
CANTÜRK İ., Project Supported by Higher Education Institutions, Parkinson hastalarının yürüyüş değişkenliklerinden hastalığın şiddetinin cinsiyete göre tahmin edilebilirliğinin araştırılması, 2020 - 2021
Cantürk İ., Kara S., Project Supported by Higher Education Institutions, Postmorterm sürece yönelik ön çalışma, 2014 - 2015

Scientific Refereeing

Kocaeli Journal of Science and Engineering, Other Journals, March 2021

Current Signal Transduction Therapy, Other Indexed Journal, October 2018
International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, SCI Journal, March 2018
IEEE Access, SCI Journal, August 2017
Journal of Forensic Science & Criminology, Other Indexed Journal, April 2017

Metrics

Publication: 23
Citation (WoS): 37
Citation (Scopus): 77
H-Index (WoS): 3
H-Index (Scopus): 5