

## Assoc. Prof. İsmail CANTÜRK

### Personal Information

**Office Phone:** [+90 212 383 6305](tel:+902123836305)

**Email:** [icanturk@yildiz.edu.tr](mailto:icanturk@yildiz.edu.tr)

**Web:** <http://avesis.yildiz.edu.tr/icanturk/>

**Address:** [icanturk@yildiz.edu.tr](mailto:icanturk@yildiz.edu.tr)

### International Researcher IDs

ScholarID: yiMzFgUAAAAJ

ORCID: 0000-0003-0690-1873

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

### Postgraduate

Applied Machine Learning, Postgraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023

### Undergraduate

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

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

Yarıiletken Fiziği, Undergraduate, 2017 - 2018

İleri Elektronik Uygulamaları, Undergraduate, 2017 - 2018

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

- I. **Investigating the impact of feature extraction methods on prediction accuracy of neurological recovery levels in comatose patients post-cardiac arrest**  
Çelik S. C., Özgüzel S. S., Cantürk İ.  
COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING, vol.2025, pp.1-16, 2025 (SCI-Expanded)
- II. **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)
- III. **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 SCIENCES, vol.17, no.3, pp.1-7, 2024 (SCI-Expanded)
- IV. **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)
- V. **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)
- VI. **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)
- VII. **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)
- VIII. **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)
- IX. **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)
- X. **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)
- XI. **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)
- XII. **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**  
Güçkiran 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)

## Papers Published in Refereed Scientific Meetings

- I. **Prediction of Schizophrenia Using Feature Extraction Methods with EEG Data**  
KÜÇÜK O., CANTÜRK İ.  
4th International Conference on Design, Research and Development, İstanbul, Turkey, 19 - 20 December 2024
- II. **Evaluating Time-Dependent Radiation Exposure to Ovaries in Simulated Scopy Scenarios**  
GÜNAY O., CANTÜRK İ., TUNÇMAN D., KESMEZACAR F. F., YEYİN N., DEMİR M.  
11th International Conference on Computational and Experimental Science and Engineering, 25 - 27 October 2024
- III. **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

- IV. **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
- V. **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
- VI. **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
- VII. **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
- VIII. **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
- IX. **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
- X. **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
- XI. **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., Serbes G., İchedef 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 görüntülemeye 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 Biyomik 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, Postmortem sürece yönelik ön çalışma, 2014 - 2015

## **Peer Reviews in Scientific Publications**

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: 26

Citation (WoS): 37

Citation (Scopus): 77

H-Index (WoS): 3

H-Index (Scopus): 5