

## Assoc. Prof. MEHMET FEYZİ AKŞAHİN

### Personal Information

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### International Researcher IDs

ORCID: 0000-0002-8911-6645

### Education Information

Post Doctorate, State University of New York College at Buffalo, United States Of America 2013 - 2014

Doctorate, Baskent University, Institute Of Science, Turkey 2007 - 2010

Undergraduate, Baskent University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering, Turkey 1997 - 2002

### Foreign Languages

French, C1 Advanced

English, C2 Mastery

### Certificates, Courses and Trainings

Health&Medicine, Roswell Park Cancer Institute Corp. Department of Radiation Safety Basic Laser Safety , Roswell Park Cancer Institute, 2013

Health&Medicine, • IACUC Responsible Care and Use of Laboratory Animals Certification Program RPCI policies, procedures and regulations in animal welfare and research AALAS Learning Library course and exam in Mouse Biomethodology Workshop in biosafety cabinet preparation, aseptic techniques Workshop in rodent handling, bleeding and injection techniques, NIH, 2013

### Dissertations

Doctorate, Uyku apnesi türlerinin sınıflandırılması, Baskent University, Institute Of Science, 2010

### Research Areas

### Academic Titles / Tasks

Associate Professor, Gazi University, Mühendislik Fakültesi, Elektrik - Elektronik Mühendisliği, 2021 - Continues

Assistant Professor, Baskent University, Faculty Of Engineering, Department Of Biomedical Engineering, 2014 - 2021

Lecturer, Baskent University, Faculty Of Engineering, Department Of Biomedical Engineering, 2010 - 2013

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

- I. **Detection of multiple sclerosis from photic stimulation EEG signals**  
Karaca B. K., Aksahin M. F., Ocal R.  
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.67, 2021 (SCI-Expanded)
- II. **Brain tumor prediction on MR images with semantic segmentation by using deep learning network and 3D imaging of tumor region**  
Karayegen G., Aksahin M. F.  
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.66, 2021 (SCI-Expanded)
- III. **A novel electroencephalography based approach for Alzheimer's disease and mild cognitive impairment detection**  
Oltu B., Aksahin M. F., Kibaroglu S.  
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.63, 2021 (SCI-Expanded)
- IV. **Quantitative sleep EEG synchronization analysis for automatic arousals detection**  
Erdamar A., Aksahin M. F.  
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.59, 2020 (SCI-Expanded)
- V. **Multi-scale classification of single-cell gel electrophoresis assay using deep learning algorithm**  
Erdamar A., Aksahin M. F.  
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.56, 2020 (SCI-Expanded)
- VI. **Heart sound recording and automatic S1-S2 waves detecting system design**  
Aksahin M. F., Oltu B., Karaca B. K.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.35, no.1, pp.61-70, 2020 (SCI-Expanded)
- VII. **Preoperative Ultrasound and Photoacoustic Imaging of Nonmelanoma Skin Cancers**  
Zeitouni N. C., Rohrbach D. J., Aksahin M. F., Sunar U.  
DERMATOLOGIC SURGERY, vol.41, no.4, pp.525-528, 2015 (SCI-Expanded)
- VIII. **Artificial Apnea Classification with Quantitative Sleep EEG Synchronization**  
Aksahin M. F., AYDIN S., Firat H., Eroglu O.  
JOURNAL OF MEDICAL SYSTEMS, vol.36, no.1, pp.139-144, 2012 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Göz Hareketlerinin Takibi ile Bilgisayar Kontrolü**  
MENTEŞ M. F., GÜVEN M. M., ÖZCAN Ş. N., AKŞAHİN M. F.  
European Journal of Science and Technology, pp.204-210, 2020 (Peer-Reviewed Journal)
- II. **Motor Seslerine Göre Otomobillerin Tanınması**  
KARAMAN E., Rende H., AKŞAHİN M. F.  
Engineer the Machinery Magazine, vol.60, no.695, pp.148-164, 2019 (Peer-Reviewed Journal)
- III. **Multifunctional Phototherapy Device Design**  
Aksahin M. F.  
ELECTRICA, vol.19, no.1, pp.65-71, 2019 (ESCI)
- IV. **Ergonomics Importance of Wearable Medical Devices**  
AKŞAHİN M. F.  
Ergonomics International Journal, vol.1, no.4, 2017 (Peer-Reviewed Journal)
- V. **Photodynamic Therapy-Induced Microvascular Changes in a Nonmelanoma Skin Cancer Model Assessed by Photoacoustic Microscopy and Diffuse Correlation Spectroscopy**  
Rohrbach D. J., Salem H., Aksahin M. F., Sunar U.  
PHOTONICS, vol.3, no.3, 2016 (ESCI)
- VI. **OBSTRUCTIVE SLEEP APNEA CLASSIFICATION WITH ARTIFICIAL NEURAL NETWORK BASED ON TWO SYNCHRONIC HRV SERIES**

## Refereed Congress / Symposium Publications in Proceedings

- I. **Automatic Classification of Diseases from Heart Sounds Kalp Seslerinden Otomatik Hastalık Sınıflandırılması**  
Demirci F., Uluca M. A., Bilgin B., Akşahin M. F.  
2022 Medical Technologies Congress, TIPTEKNO 2022, Antalya, Turkey, 31 October - 02 November 2022
- II. **Automatic Glacoma Detection Using Whale Optimization and Support Vector Machines BALİNA OPTİMİZASYON VE DESTEK VEKTÖR MAKİNELERİ KULLANARAK OTOMATİK GLOKOM TESPİTİ**  
Özen S. K., AKŞAHİN M. F.  
2022 Medical Technologies Congress, TIPTEKNO 2022, Antalya, Turkey, 31 October - 02 November 2022
- III. **Computer Control with Eye Movement Tracking**  
Menteş M. M., Güven M. M., Özcan Ş. N., AKŞAHİN M. F.  
2 nd International Congress on Human-Computer Interaction, Optimization and Robotic Applications, 26 - 27 June 2020
- IV. **Automatic Brain Tissue Segmentation on TOF MRA Image**  
Ozen S. K., Aksahin M. F.  
Medical Technologies National Congress (TIPTEKNO), ELECTR NETWORK, 19 - 20 November 2020
- V. **IDFATIFICATION USING FCG SIGNALS**  
Kilicer E. C., Ay S., Aksahin M. F.  
Medical Technologies National Congress (TIPTEKNO), ELECTR NETWORK, 19 - 20 November 2020
- VI. **Sleep Apnea Detection with Respiratory Modulated ECG signal**  
AKŞAHİN M. F., ÜNCÜ Y. A.  
2nd International Conference on Technology and Science, 14 - 16 November 2019
- VII. **Tek Hücreli Jel Elektroforez Testi Görüntülerinin Sınıflandırılması İçin Derin Öğrenme Tabanlı Analiz Algorithması**  
ERDAMAR A., AKŞAHİN M. F.  
20. Uluslararası Katılımlı Biyoteknoloji Kongresi, Turkey, 10 - 12 October 2019
- VIII. **Epilepsy Classification in Ictal Stage From EEG Signals for Children**  
Recher D., Aksahin M. F.  
Medical Technologies Congress (TIPTEKNO), İzmir, Turkey, 3 - 05 October 2019, pp.172-175
- IX. **Investigation of EEG Signal for Diagnosis of Mild Cognitive Impairment and Alzheimer's Disease**  
Oltu B., Aksahin M. F., Kibaroglu S.  
Medical Technologies Congress (TIPTEKNO), İzmir, Turkey, 3 - 05 October 2019, pp.495-498
- X. **Detection of Hypopnea Using Respiratory Signals**  
Oktan A. D., Aksahin M. F.  
Medical Technologies Congress (TIPTEKNO), İzmir, Turkey, 3 - 05 October 2019, pp.322-325
- XI. **Detection of Multiple Sclerosis Disease by EEG Coherence Analysis**  
Karaca B. K., Aksahin M. F., Ocal R.  
Medical Technologies Congress (TIPTEKNO), İzmir, Turkey, 3 - 05 October 2019, pp.21-24
- XII. **Neurofeedback System Design Based On Discrete Wavelet Transform**  
Ozen S. K., Aksahin M. F.  
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XIII. **Sleep Apnea Detection Using Blood Pressure Signal**  
Aksahin M. F., Oltu B., Karaca B. K.  
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XIV. **Classification of Heart Sound Recordings With Continuous Wavelet Transform Based Algorithm**  
Karaca B. K., Oltu B., Kantar T., Kilic E., Aksahin M. F., Erdamar A.

- 26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XV. **Segmentation of Live and Dead Cells in Tissue Scaffolds**  
Uyar T., Erdamar A., Aksahin M. F., GÜMÜŞDERELİOĞLU M., Irmak G., Eroglu O.  
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XVI. **Classification of Sleep Apnea by Photoplethysmography Signal**  
Aksahin M. F., Karaca B. K., Oltu B.  
Medical Technologies National Congress (TIPTEKNO), Magusa, CYPRUS, 8 - 10 November 2018
- XVII. **Heart Sound Recording Device Design and, Automatic S1 and S2 Waves Detection**  
AKŞAHİN M. F., OLTU B., KARACA B. K.  
ICAT 2017, 12 - 15 September 2017
- XVIII. **Automatic Vascular Segmentation on Angio Images**  
Akshain M. F., Ozen S. K., Eren N. T.  
Medical Technologies National Congress (TIPTEKNO), Trabzon, Turkey, 12 - 14 October 2017
- XIX. **Sleep Apnea Detection Using With EEG, ECG and Respiratory Signals**  
Aksahin M. F., Erdamar A., Isik A., Karaduman A.  
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017
- XX. **Detection of Epilepsy Disease From EEG Signals With Artificial Neural Networks**  
Ozkan C., Dogan S., Kantar T., Aksahin M. F., Erdamar A.  
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.693-696
- XXI. **Automatic detection of MC3T3 proliferation on confocal laser scanning microscope images by using image processing techniques**  
UYAR T., GÜMÜŞDERELİOĞLU M., DEMİRTAŞ T. T., IRMAK G., ERDAMAR A., AKŞAHİN M. F., EROĞUL O.  
BIOMED 2015, 22 - 24 October 2015
- XXII. **Detection of PC12 cell line proliferation on AAO membranes using image processing techniques**  
Uyar T., Erdamar A., Aksahin M. F., Eroglu O., Altuntas S., Buyukserin F.  
European Biotechnology Congress, Bucharest, Romania, 7 - 09 May 2015, vol.208
- XXIII. **Uykuda Gelişen Apnenin EKG ve PPG Sinyallerini Eş Zamalı Kullanarak Sınıflandırılması**  
AKŞAHİN M. F., ERDAMAR A., Fırat H., EROĞUL O., ARDIÇ S.  
11. Ulusal Uyku Tıbbı Kongresi, Turkey, 6 - 10 November 2010
- XXIV. **Classification of sleep apnea types using EEG synchronization criteria**  
AKŞAHİN M. F., AYDIN S., Fırat H., EROĞUL O., ARDIÇ S.  
2010 15th National Biomedical Engineering Meeting, Antalya, Turkey, 21 - 24 April 2010
- XXV. **Designing 3 language talkative system of heart beater**  
Perktaş B., AKŞAHİN M. F.  
2010 15th National Biomedical Engineering Meeting, Antalya, Turkey, 21 - 24 April 2010
- XXVI. **Uykuda Gelişen Apnenin Yapay Sinir Ağları Kullanarak Sınıflandırılması**  
AKŞAHİN M. F., Fırat H., AYDIN S., EROĞUL O., ARDIÇ S.  
10. Ulusal Uyku Tıbbı Kongresi, Antalya, Turkey, 8 - 12 December 2009
- XXVII. **Başkent Üniversitesi Biyomedikal Mühendisliği Bölümü Tanıtımı**  
AKŞAHİN M. F., YILMAZ B.  
IV. Elektrik Elektronik Bilgisayar Biyomedikal Mühendislikleri Eğitimi Sempozyumu, Turkey, 22 - 24 October 2009
- XXVIII. **Fotopletismografi PPG sistemi Tasarımı ve İnsan Vücudundaki Oksijen Değişiminin Gözlemi**  
Altınel M. K., AKŞAHİN M. F.  
Biyomut, Turkey, 22 - 23 May 2007

## Metrics

Publication: 46

Citation (WoS): 77

Citation (Scopus): 71

H-Index (WoS): 6

H-Index (Scopus): 5