



HACER KUDUZ

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International Researcher IDs

ScholarID: [pdkknhYAAAAJ](https://orcid.org/0000-0002-7038-4017)

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Publons / Web Of Science ResearcherID: C-7656-2019

ScopusID: 57196044369

Yoksis Researcher ID: 224159



Biography

Hacer Kuduz (Dr.) received her B.Sc. (2014), M.Sc. (2018) and Ph.D. (2024) degrees from Erciyes University, Istanbul Technical University and Istanbul University-Cerrahpaşa Department of Biomedical Engineering, respectively. Between 2015 and 2017, she worked as a research assistant at ITU Department of Electronic Communication Engineering and as a researcher at the Biomechanics Laboratory of the Faculty of Mechanical Engineering. Then, until 2020, she worked as a Research Assistant at Istanbul University-Cerrahpaşa Department of Electrical and Electronics and since 2020, she has been working as a Research Assistant at Akdeniz University Department of Biomedical Engineering. Her current research interests include human gait recognition, biomechanics, artificial intelligence applications in biomedical engineering, pattern recognition, biomedical signal and image processing, wearable sensor data processing and, finite element analysis in biomechanics.

Learning Knowledge

Doctorate 2018 - 2024	İstanbul University-Cerrahpaşa, Institute Of Graduate Education, Department Of Biomedical Engineering, Turkey
Undergraduate 2018 - 2022	Anadolu University, Open Education Faculty, Yönetim Bilişim Sistemleri, Turkey
Postgraduate 2015 - 2018	Istanbul Technical University, Fen Bilimleri Enstitüsü, Biyomedikal Mühendisliği, Turkey
Undergraduate 2010 - 2014	Erciyes University, Mühendislik Fakültesi, Biyomedikal Mühendisliği , Turkey

Foreign Languages

Certificates, Courses and Trainings

Education Management and Planning, Eğiticinin Eğitimi, İstanbul Üniversitesi, 2022
Health&Medicine, Deney Hayvanları Kullanımı Sertifika Programı, Akdeniz Üniversitesi, 2022
IT, Yapay Zeka ve Makine Öğrenmesi Python Uygulamaları Kursu, C ve Sistem Programcılar Derneği, 2021
Health&Medicine, E4B | Entrepreneurship for Biomedicine, Washington University School of Medicine in St. Louis, 2020
IT, Sıfırdan Başlayacaklar için Web Yazılım Uzmanlığı Eğitimi (Python), Özel Yazılım 24 Kurs Merkezi, 2018
IT, Yeni Başlayacaklar için Yazılım Uzmanlığı Eğitimi (C#), Özel Yazılım 24 Kurs Merkezi, 2017
IT, ANSYS Eğitimi, Özel Üçüncü Binyıl Teknik Eğitim Akademisi, 2016
IT, CATIA Eğitimi, Özel Üçüncü Binyıl Teknik Eğitim Akademisi, 2016

Dissertations

Doctorate, Human gait recognition based on deep learning using lower limb biomechanical signal analysis, İstanbul University-Cerrahpaşa, Institute Of Graduate Education, Department Of Biomedical Engineering, 2024
Postgraduate, Biomechanical analysis of three different internal plate fixators for midshaft clavicle fractures using finite element method, İstanbul Technical University, Fen Bilimleri Enstitüsü, Electronics and Communication Engineering Department of Biomedical Engineering, 2018

Academic Titles / Tasks

Research Assistant 2015 - Continues	Akdeniz University, Faculty of Engineering, Department of Biomedical Engineering
Research Assistant 2018 - 2020	İstanbul University-Cerrahpaşa, Faculty Of Engineering, Department Of Electrical And Electronics Engineering
Research Assistant 2015 - 2017	Istanbul Technical University, Elektrik-Elektronik, Elektronik Ve Haberleşme Mühendisliği

Published journal articles indexed by SCI, SSCI, and AHCI

- Biomechanical sensor signal analysis based on machine learning for human gait classification**
Kuduz H., Kaçar F.
JOURNAL OF ELECTRICAL ENGINEERING, vol.75, no.6, pp.513-521, 2024 (SCI-Expanded)
- Examination of the Phenomenon of Exercise-induced Hypoalgesia in Middle-aged Individuals using Nociceptive Flexion Reflex Parameters**
Hasanli N., KUDUZ H., Sari M. Z., Gundogdu A., Topal D., Sadi M., UÇAR N., ÖZKAYA Y. G.
ACTA PHYSIOLOGICA, vol.234, pp.88, 2022 (SCI-Expanded)
- Biomechanical comparison of humeral nails with different distal locking mechanisms: Insafelock nails versus conventional locking nails**
Erden T., Kapıcıoğlu M., Demirtas A., Bilsel K., Akpınar F., Kuduz H.
Acta Orthopaedica et Traumatologica Turcica, vol.53, no.6, pp.490-496, 2019 (SCI-Expanded)
- Biomechanical comparison of three different plate configurations for comminuted clavicle midshaft**

fracture fixation

UZER G., YILDIZ F., Batar S., Bozdağ S. E., Kuduz H., Bilsel K.

JOURNAL OF SHOULDER AND ELBOW SURGERY, vol.26, no.12, pp.2200-2205, 2017 (SCI-Expanded)

Articles Published in Other Journals

- 1. Human lower-extremity movement classification based on biomechanical sensor data: Machine learning approach**
Kuduz H., Kaçar F.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, vol.42, no.5, pp.1378-1390, 2024 (ESCI)
- 2. A deep learning approach for human gait recognition from time-frequency analysis images of inertial measurement unit signal**
Kuduz H., Kaçar F.
International Journal of Applied Methods in Electronics and Computers (IJAMEC), vol.11, no.3, pp.165-173, 2023 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- 1. Finite Element Study: Biomechanical Assessment of Three Different Internal Plate Fixations In Comminuted Midshaft Clavicle Fractures**
Kuduz H., Sünbuloğlu E., Uzer G., Bilsel K., Erden T.
International Congress on Engineering & Architecture, Antalya, Turkey, 14 - 16 November 2018, pp.95-111
- 2. Biomechanical comparison of three different plate configuration for clavicle midshaft fracture fixation**
Uzer G., Yıldız F., Bilsel K., KUDUZ H.
SECEC-ESSE CONGRESS (EUROPEAN SOCIETY FOR SURGERY OF THE SHOULDER AND THE ELBOW), Berlin, Germany, 13 - 16 September 2017, pp.20
- 3. Spor Yapan Bireylerde Elektromiyogram Sinyallerinin Dalgacık Dönüşümü Kullanarak Sınıflandırılması**
Acer Ç. G., KUDUZ H., Eset K., Latifoğlu F.
Tıp Teknolojileri Ulusal Kongresi, Nevşehir, Turkey, 25 - 27 September 2014, pp.25-27
- 4. Elektromiyogram Sinyallerinden Tekil Spektrum Analizi Kullanarak Öznitelik Çıkarımı**
KUDUZ H., Acer Ç. G., Latifoğlu F., Eset K.
Tıp Teknolojileri Ulusal Kongresi, Nevşehir, Turkey, 25 - 27 September 2014, pp.50-53

Academic and Administrative Experience

Metrics

Publication: 10

Citation (WoS): 20

Citation (Scopus): 23

H-Index (WoS): 2

H-Index (Scopus): 2

Congress and Symposium Activities

Elsevier 5N1K EKUAL Seminer - 3 Adımda Sciencedirect, Attendee, Turkey, 2021

7. Biyomalzeme Günleri, Boğaziçi Üniversitesi, Attendee, İstanbul, Turkey, 2020

Elsevier Yazar Çalıştayı, Researcher Academy, İstanbul Üniversitesi, Attendee, İstanbul, Turkey, 2018

International Congress on Engineering & Architecture (ENAR18), Attendee, Antalya, Turkey, 2018

5. Biyomalzeme Günleri, Yıldız Teknik Üniversitesi, Attendee, İstanbul, Turkey, 2018

Research Areas

Artificial Intelligence, Computer Learning and Pattern Recognition, Pattern Recognition and Image Processing, Biomedical Engineering, Biomechanics, Biosignal Processing, Finite Element Methods