

## Asst. Prof. ERCAN AYKUT

### Personal Information

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### International Researcher IDs

ScholarID: RgLwcksAAAAJ

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Publons / Web Of Science ResearcherID: GAF-4760-2022

ScopusID: 55195763000

Yoksis Researcher ID: 342984

### Education Information

Undergraduate, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, Turkey  
2020 - 2021

Doctorate, Marmara University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (Dr), Turkey 2008 - 2019

Postgraduate, Marmara University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (YI) (Tezli), Turkey 2003 - 2007

Undergraduate, Marmara University, Teknik Eğitim Fakültesi, Elektrik Eğitimi Bölümü, Turkey 1998 - 2002

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Marmara üniversitesi Göztepe kampüsü için hibrit enerji sistemlerinin tekno-ekonomik ve çevresel açıdan incelenmesi, Marmara University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (Dr), 2019

Postgraduate, Elektrikli ev aletlerinde CE uyumluluğu ve bir uygulama, Marmara University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (YI) (Tezli), 2007

### Research Areas

Electrical and Electronics Engineering, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Istanbul Gelisim University, FACULTY OF ENGINEERING AND ARCHITECTURE, ELECTRICAL AND ELECTRONIC ENGINEERING (ENGLISH), 2023 - Continues

Assistant Professor, Istanbul Gelisim University, ISTANBUL GELISIM VOCATIONAL SCHOOL, ELECTRICS, 2021 - Continues

## Academic and Administrative Experience

Head of Department, Istanbul Gelisim University, FACULTY OF ENGINEERING AND ARCHITECTURE, ELECTRICAL AND ELECTRONIC ENGINEERING (ENGLISH), 2023 - Continues

Head of Department, Istanbul Gelisim University, INSTITUTE OF GRADUATE STUDIES, ELECTRICAL AND ELECTRONICS ENGINEERING, 2023 - Continues

Head of Department, Istanbul Gelisim University, INSTITUTE OF GRADUATE STUDIES, ELECTRICAL AND ELECTRONICS ENGINEERING(ENGLISH), 2023 - Continues

Head of Department, Istanbul Gelisim University, FACULTY OF ENGINEERING AND ARCHITECTURE, ELECTRICAL AND ELECTRONICS ENGINEERING, 2023 - Continues

Internship Committee Member, Istanbul Gelisim University, FACULTY OF ENGINEERING AND ARCHITECTURE, 2023 - Continues

Fakülte Kurulu Üyesi, Istanbul Gelisim University, FACULTY OF ENGINEERING AND ARCHITECTURE, ELECTRICAL AND ELECTRONICS ENGINEERING, 2023 - Continues

Head of Department, Istanbul Gelisim University, ISTANBUL GELISIM VOCATIONAL SCHOOL, ELECTRICS, 2022 - 2023

Staj Koordinatörü, Istanbul Gelisim University, ISTANBUL GELISIM VOCATIONAL SCHOOL, ELECTRICS, 2022 - 2022

## Courses

Advanced Signal and Systems Theory, Postgraduate, 2023 - 2024

Signals and Systems, Postgraduate, 2023 - 2024

Circuit Analysis I, Undergraduate, 2023 - 2024

ELEKTRİK ELEKTRONİK MÜHENDİSLİĞİ PROGRAMLAMA, Undergraduate, 2022 - 2023

Mantıksal Devre Tasarımı, Undergraduate, 2022 - 2023

ELECTRICAL - ELECTRONIC ENGINEERING PROGRAMMING, Undergraduate, 2022 - 2023

Special Topics in Electrical Power Systems, Postgraduate, 2023 - 2024

İleri Kontrol Sistemleri, Postgraduate, 2022 - 2023

Devre Analizi I, Undergraduate, 2023 - 2024

Programlanabilir Mantıksal Denetleyiciler, Associate Degree, 2022 - 2023

Bitirme Projesi I, Undergraduate, 2023 - 2024

Tesisat Bilgisi, Associate Degree, 2022 - 2023, 2021 - 2022

Dijital Sistemler I Lab, Undergraduate, 2021 - 2022

Havacılık Dijital Sistemleri II, Undergraduate, 2021 - 2022

Güç Elektroniği, Associate Degree, 2021 - 2022

Dijital Sistemler I, Undergraduate, 2021 - 2022

Güç Elektroniği, Undergraduate, 2022 - 2023

Ölçme Tekniği, Associate Degree, 2021 - 2022

Elektronik Ölçme Tekniği ve İş Güvenliği, Associate Degree, 2021 - 2022

Özel Tesisat, Associate Degree, 2020 - 2021

## Jury Memberships

Doctorate, Doctorate, Marmara Üniversitesi, January, 2022

Post Graduate, Post Graduate, Marmara Üniversitesi, August, 2021

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

1. **Wind energy potential and large-scale turbine performance analysis for Mogadishu – Somalia**  
DURSUN B., AYKUT E.  
Energy for Sustainable Development, vol.81, 2024 (SCI-Expanded)

- II. **The significance, potential and the current use of renewable energy in TR83 region, Türkiye**  
Aykut E., Dursun B.  
International Journal of Environmental Science and Technology, vol.21, no.6, pp.5513-5528, 2024 (SCI-Expanded)
- III. **Comprehensive environmental and techno-economic feasibility assessment of biomass- solar on grid hybrid power generation system for Burdur Mehmet Akif Ersoy University Istiklal Campus**  
Aykut E., Dursun B., Görgülü S.  
HELIYON, vol.9, no.2, pp.1-13, 2023 (SCI-Expanded)
- IV. **Techno-economic and environmental analysis of grid connected hybrid wind/photovoltaic/biomass system for Marmara University Goztepe campus**  
Aykut E., Terzi U. K.  
International Journal of Green Energy, vol.17, no.15, pp.1036-1043, 2020 (SCI-Expanded)
- V. **An investigation on wind/PV/fuel cell/battery hybrid renewable energy system for nursing home in Istanbul**  
Dursun B., Aykut E.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART A-JOURNAL OF POWER AND ENERGY, vol.233, no.5, pp.616-625, 2019 (SCI-Expanded)
- VI. **ENVIRONMENTAL ASSESSMENT OF WIND ENERGY CONVERSION SYSTEMS IN TURKEY**  
Kocabay S., Nogay S., Fidan C. B., Dursun B., Gorgulu S., Gokcol C., Akinci T. C., Aykut E.  
JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY, vol.13, no.1, pp.307-318, 2012 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Grid Integration Strategies for Optimizing Renewable Energy Deployment and Grid Resilience**  
Aykut E., Alshuraida I.  
Balkan Journal of Electrical and Computer Engineering, vol.12, no.3, pp.247-254, 2024 (Peer-Reviewed Journal)
- II. **Gamified Violin Playing in Virtual Reality Based Metaverse Environment**  
Aykut E., Taş S.  
Journal of Emerging Computer Technologies, vol.3, no.1, pp.7-11, 2023 (Peer-Reviewed Journal)
- III. **Assessment of Optimum Renewable Energy System for the Somalia-Turkish Training and Research Hospital in Mogadishu**  
Dursun S., Aykut E., Dursun B.  
Journal of Renewable Energy and Environment, vol.8, no.3, pp.54-67, 2021 (Scopus)
- IV. **An Assessment of Renewable Energy Options for Somalia Turkey Hospital**  
Dursun B., Dursun S., Aykut E.  
Journal Of Electrical Engineering, vol.8, no.1, pp.27-45, 2020 (Peer-Reviewed Journal)
- V. **ELEKTRİKLİ EV ALETLERİNDE CE UYUMLULUĞU VE BİRUYGULAMA**  
Ekren N., Aykut E., Dursun B.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSİTESİ MUHENDİSLİK BİLİMLERİ DERGİSİ, vol.15, no.1, pp.25-32, 2009 (Peer-Reviewed Journal)
- VI. **Lighting Computer Programs in Lighting Technology**  
Ekren N., Dursun B., Aykut E.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.21, no.1, pp.15-20, 2007 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Yenilenebilir Güç Üretim Sistemlerinin Modellenmesi ve Optimizasyonu**  
DURSUN B., AYKUT E.  
in: Elektrik Elektronik ve Kontrol Mühendisliği Alanında Farklı Yaklaşımlar, ÜZMÜŞ HASAN, Editor, Bidge Yayınları, pp.243-261, 2024

## Refereed Congress / Symposium Publications in Proceedings

- I. **Performance Analysis of Artificial Neural Networks in the Diagnosis of Thyroid Diseases**  
MUMCU M. C., AYKUT E., BENLİ S. N., ERDOĞAN K., YAVUZ İ.  
International Conference on Advances in Electrical-Electronics Engineering and Computer Science (ICEECS 2024), Ankara, Turkey, 9 - 10 November 2024
- II. **ÜÇ FAZLI ASENKRON MOTORUN PLC VE HMI İLE MODBUS ÜZERİNDEN KONTROLÜ**  
AYKUT E., ERDOĞAN K., YAVUZ İ., MUMCU M. C., BENLİ S. N.  
Ases III. International Bandırma Scientific Studies Conference, Balıkesir, Turkey, 11 - 13 October 2024, pp.102
- III. **PLC AND HMI BASED METAL CUTTING MACHINE**  
AYKUT E.  
International 9th Socrates Health, Engineering and Applied Sciences Congress, İstanbul, Turkey, 16 - 17 August 2024, pp.427
- IV. **ANİ SU ISITICI TERMOSTATI İMALATI İÇİN PERÇİN PRESİ OTOMASYONU**  
AYKUT E., TAŞ S.  
ASES II. INTERNATIONAL CANAKKALE SCIENTIFIC STUDIES CONFERENCE, Çanakkale, Turkey, 24 - 25 February 2024, pp.11
- V. **KOMÜTATÖR ANAHTAR ÜRETİM KONTROLÜNDE KULLANILMAK ÜZERE ARDUİNO KONTROLLÜ KONTAK BASKISI TESTİ MAKİNESİ TASARIMI**  
AYKUT E., TAŞ S.  
Ases International Bandırma Scientific Studies Conference, Balıkesir, Turkey, 27 October - 29 November 2023
- VI. **Karbon Ayak İzi ve İklim Değişikliği**  
TAŞ S., AYKUT E., MUMCU M. C., ERDOĞAN K., ÇETİNKAYA A., TOMBAL N. Y., YAVUZ İ.  
4th International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 10 - 13 November 2022, pp.13-14
- VII. **Meslek Yüksekokulu Öğrencileri İçin Yaz Stajı Yazılımı**  
TAŞ S., AYKUT E.  
4th International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 10 - 13 November 2022, pp.266
- VIII. **360 VR Kamera ile Sanal Gerçeklik Ortamında Uzaktan Eğitim**  
AYKUT E., TAŞ S.  
2nd International Conference on Engineering and Applied Natural Sciences (ICEANS 2022), Konya, Turkey, 15 October 2022, pp.227
- IX. **Sanal Gerçeklik (VR) Ortamında Keman Eğitimi**  
AYKUT E., TAŞ S.  
1st International Conference on Innovative Academic Studies (ICIAS 2022), Konya, Turkey, 10 September 2022, pp.185
- X. **An FDTD modeling of GPR for Detecting and Mapping Archeological Sites**  
MUMCU M. C., YAVUZ İ., AYKUT E., TAŞ S.  
International Conferences on Science and Technology (ICONST), Budva, Montenegro, 07 September 2022
- XI. **Sanal Gerçeklik Teknolojisi Kullanımıyla Obezite Mücadelesi**  
AYKUT E., TAŞ S.  
Uluslararası Güncel Araştırmalar Sempozyumu 2022 (UGAS'22), Turkey, 21 February 2022
- XII. **Termostat Üretimi İçin Mikro Kontrolör Tabanlı Otomatik Kalibrasyon**  
AYKUT E., TAŞ S.  
Uluslararası Güncel Araştırmalar Sempozyumu 2022 (UGAS'22), Turkey, 21 February 2022
- XIII. **Determination of the optimum hybrid renewable power system for Marmara University Goztepe Campus**  
AYKUT E., TERZİ Ü. K.  
6th European Conference on Renewable Energy Systems (ECRES 2018), İstanbul, Turkey, 25 June 2018
- XIV. **An investigation on wind/PV/fuel cell/battery hybrid renewable energy system for nursing home in**

## **Istanbul**

DURSUN B., AYKUT E.

6. EUROPEAN CONFERENCE ON RENEWABLE ENERGY SYSTEMS ( ECRES 2018 ), İstanbul, Turkey, 25 June 2018

### **XV. Examination of Harmonics in Incandescent Lamps and CFLs**

AYKUT E., DURSUN B., BÜYÜKTÜMTÜRK F.

2010 Conference on Energy Strategy and Technology, Pekin, China, 23 October 2010, pp.121-124

## **Supported Projects**

Haşiloğlu A., Özyiğit H. A., Aykut E., Dumanlı M., Şenol M., Öztaş O., Pourabbas S., Güngör A., Taştan A. N., Avcı M. C., et al, Project Supported by Other Official Institutions, IGUROB: Yapay Zeka Destekli İnsansı Robot Tasarımı, 2024 - 2027

Kantar L., Aykut E., Çetinkaya A., Taş S., Yaşar Ç., Erdoğan K., Saray Çetinkaya T., Dursun B., Project Supported by Higher Education Institutions, İSTANBUL GELİŞİM ÜNİVERSİTESİ KULE BİNASININ KARBON AYAK İZİNİN HESAPLANMASI VE YAPAY ZEKA YÖNTEMLERİ İLE KISA - ORTA VE UZUN DÖNEM YÜK TAHMİNİ GERÇEKLEŞTİRİLMESİ, 2024 - 2025

Taş S., Aykut E., Erdoğan K., Yavuz İ., Mumcu M. C., Derdiyok Ş., TUBITAK Project, Temel PLC Eğitimi, 2024 - 2024

Aykut E., Taş S., Project Supported by Higher Education Institutions, İstanbul Gelişim Meslek Yüksekokulu Sayısal Elektronik Laboratuvar Dersinin Sanal Gerçeklik Ortamına Aktarılması, 2023 - 2023

## **Scientific Refereeing**

Balkan Journal of Electrical and Computer Engineering, National Scientific Refreed Journal, October 2024

European Mechanical Science, National Scientific Refreed Journal, February 2024

European Journal of Technique, National Scientific Refreed Journal, December 2023

kahramanmaraş Sütçü İmam Üniversitesi Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, July 2023

Balkan Journal of Electrical and Computer Engineering, National Scientific Refreed Journal, June 2023

Balkan Journal of Electrical and Computer Engineering, National Scientific Refreed Journal, April 2023

HELIYON, Journal Indexed in SCI-E, March 2023

İnternational journal of engineering technologies, National Scientific Refreed Journal, September 2022

European Journal of Technique, National Scientific Refreed Journal, November 2021