

Asst. Prof. YAHYA DANAYİYEN

Personal Information

Email: yahya@ktu.edu.tr

Web: <https://avesis.ktu.edu.tr//yahya>

Address: Karadeniz Teknik Üniversitesi Elektrik Elektronik Mühendisliği Bölüm Sekreterliği

International Researcher IDs

ScholarID: Z3B11-sAAAAJ

ORCID: 0000-0002-8679-4088

Publons / Web Of Science ResearcherID: C-2728-2019

ScopusID: 56038876100

Yoksis Researcher ID: 183969

Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Elektrik Elektronik Mühendisliği, Turkey 2014 - 2021

Doctorate, Seoul National University Of Science And Technology, South Korea 2017 - 2018

Doctorate, University of Southampton, Electronics And Computer Science, Electronics And Computer Science, United Kingdom 2015 - 2015

Postgraduate, Högskola Dalarna (Dalarna University College), Faculty Of Energy And Environmental Engineering, Solar Energy Engineering, Sweden 2011 - 2011

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Kesintisiz Güç Kaynaklarında Model Öngörülü Kontrol Uygulamaları, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, 2021

Postgraduate, Model Öngörülü Kontrol Yönteminin Örneklerle Karşılaştırmalı İncelenmesi, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, 2013

Research Areas

Optimal Control, Electrical and Electronics Engineering, Direct Energy Conversion and Energy Storage, Renewable energy, Power Electronics, Electric Motor Drivers, Power Converters, System Dynamics and Control

Academic Titles / Tasks

Research Assistant, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, 2012 - 2021

Courses

Aydınlatma Tekniđi, Undergraduate, 2022 - 2023
Lighting Techniques , Undergraduate, 2022 - 2023
Mühendislik Optimizasyonu, Postgraduate, 2022 - 2023
Drive Systems, Undergraduate, 2021 - 2022
Güç Elektroniđi Uygulamaları, Undergraduate, 2022 - 2023
Power Electronic Circuits, Undergraduate, 2022 - 2023
Güç Elektroniđi Devreleri, Undergraduate, 2022 - 2023

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Model Predictive Control of Uninterruptible Power Supply with Robust Disturbance Observer**
Danayiyen Y., Lee K., Choi M., Lee Y. I.
ENERGIES, vol.12, no.15, 2019 (SCI-Expanded)

Articles Published in Other Journals

- I. **Robust power stabilizing control of a grid-connected inverter using linear matrix inequality**
Soth P., Noun S., Tang H., Or C., Srang S., DANAYİYEN Y., Choeung C.
Sigma Journal of Engineering and Natural Sciences, vol.42, no.5, pp.1367-1377, 2024 (ESCI)
- II. **Symmetrical components-based robust stabilizing control of a grid-connected inverter under unbalanced voltage sag**
Choeung C., Danayiyen Y., Srang S., Lee Y.
JOURNAL OF ENGINEERING-JOE, no.8, 2024 (ESCI)
- III. **A Novel Fractional Order Proportional Integral-Fractional Order Proportional Derivative Controller Design Based on Symbiotic Organisms Search Algorithm for Speed Control of a Direct Current Motor**
DANAYİYEN Y., DİNCER K., Nuhoglu Y.
ELECTRICA, vol.24, pp.327-335, 2024 (ESCI)
- IV. **MODEL PREDICTIVE CONTROL OF A DC-DC BUCK CONVERTER**
DANAYİYEN Y., ALTAŞ İ. H., ŞAHİN E.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, vol.8, no.2, pp.91-97, 2017 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **ÜÇ FAZLI ÇİFT AKTİF KÖPRÜLÜ DA-DA DÖNÜŞTÜRÜCÜNÜN METASEZGİSEL ALGORİTMA TABANLI PI DENETLEYİCİ İLE KONTROLÜ**
Abdiođlu T., DANAYİYEN Y.
KARADENİZ 17th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Rize, Turkey, 8 - 10 November 2024, pp.532-544
- II. **PARÇACIK SÜRÜ OPTİMİZASYONU YÖNTEMİ İLE DENKLEŞTİRİCİ KAT SAYILARININ BULUNMASI**
Derin H., Yeter E., Danayiyen Y.
KARADENİZ 13TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Rize, Turkey, 8 - 10 November 2024, pp.545-556
- III. **Hava Araçları İçin DA Mikro Şebeke Tasarımı**
Aksoy A., Bayraklı N., Yeter E., Danayiyen Y.
2024 Innovations in Intelligent Systems and Applications Conference (ASYU), Ankara, Turkey, 16 - 18 October 2024, pp.1-5
- IV. **Internal Consumption Vehicle Speed Control with Rain Optimization Algorithm Based PID Controller**
TAŞDEMİR A. B., Heybetli F., Şenyiđit Ş., DANAYİYEN Y.

2024 Innovations in Intelligent Systems and Applications Conference (ASYU), Ankara, Turkey, 16 - 18 October 2024

- V. **Hidroelektrik Santral Modeli için PSO, GWO ve MA Optimizasyon Algoritmalarıyla Kesir Dereceli PID Denetleyici Tasarımı**
Köse İ. H., Danayıye Y., Çavdar B.
Akıllı Sistemlerde Yenilikler ve Uygulamaları Konferansı (ASYU), Sivas, Turkey, 11 - 13 October 2023
- VI. **Nonlinear Convergence Factor Based Grey Wolf Optimization Algorithm and Load Frequency Control**
HOCAOĞLU G. S., ÇAVLI N., KILIÇ E., DANAYİYEN Y.
5th Global Power, Energy and Communication Conference (GPECOM), Nevşehir, Turkey, 14 - 16 June 2023, pp.282-287
- VII. **X-Band Pyramidal Horn Antenna Directivity Optimization with Symbiotic Organism Search Algorithm**
SAĞ ÖRNEK R., ATEŞ O. K., BOĞA A. Y., DANAYİYEN Y.
5th Global Power, Energy and Communication Conference (GPECOM), Nevşehir, Turkey, 14 - 16 June 2023, pp.519-523
- VIII. **A Comparative Study for Optimum Computation of PID Parameters Using Metaheuristic Algorithms in a DC-DC Buck Converter Application**
Akay B., Danayıyen Y.
13th International Istanbul Scientific Research Congresses, İstanbul, Turkey, 29 April 2023, pp.259-266
- IX. **Karınca Kolonisi Optimizasyon Algoritması ile Bir AVR Sistemi için Optimum PID Denetleyici Tasarımı**
Yurdusever T., Danayıyen Y.
1th International Conference on Frontiers in Academic Research, Konya, Turkey, 18 - 21 February 2023, vol.1, pp.108-113
- X. **Robust Discrete Time Disturbance Observer with Finite Control Set Model Predictive Control in UPS System**
Danayıyen Y., Altaş İ. H., Lee Y. I.
IFAC Workshop on Control of Smart Grid and Renewable Energy Systems (CSGRES), Jeju, South Korea, 10 - 12 June 2019, vol.52, pp.51-56
- XI. **A Novel Robust Disturbance Observer for Uninterruptible Power Supplies**
DANAYİYEN Y., LEE Y. I.
18th International Conference on Control, Automation and Systems (ICCAS 2018), Pyeongchang, South Korea, 17 - 20 October 2018, pp.44
- XII. **Güneş Paneli İle Beslenen Kesintisiz Güç Kaynağında Yük Akımının Model Öngörülmesi Kontrolü**
Danayıyen Y., Altaş İ. H.
International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 21 - 23 September 2017, pp.1408
- XIII. **Dalga/Ultra Kondansatör Enerji Sistemi için Bir DA-DA Artıran Çeviricinin Bulanık Mantık ile Denetimi**
ŞAHİN E., ALTAŞ İ. H., DANAYİYEN Y.
Akıllı Sistemlerde Yenilikler ve Uygulamaları Sempozyumu (ASYU), Düzce, Turkey, 29 September - 01 October 2016, pp.158-163
- XIV. **Alçaltan DA-DA Dönüştürücünün Model Öngörülmesi Kontrolü**
DANAYİYEN Y., ALTAŞ İ. H., ŞAHİN E.
Akıllı Sistemlerde Yenilikler ve Uygulamaları Sempozyumu (ASYU2016), Düzce, Turkey, 29 September - 01 October 2016, pp.154-157
- XV. **Laguerre Fonksiyonları Kullanarak DA Motor Hızının Sürekli Zamanlı Model Öngörülmesi Kontrolü**
DANAYİYEN Y., ALTAŞ İ. H.
Akıllı Sistemlerde Yenilikler ve Uygulamaları Sempozyumu (ASYU2014), İzmir, Turkey, 9 - 10 October 2014, pp.41
- XVI. **DESIGN OF A FUZZY LOGIC CONTROLLER FOR A 2-DOF ROBOT MANIPULATOR**
AYAS M. Ş., DANAYİYEN Y., ALTAŞ İ. H.
10th International Conference on Electronics, Computer and Computation (ICECCO), Ankara, Turkey, 7 - 09 November 2013, pp.265-268

Supported Projects

ATASOY A., SEVİM Y., HACIOĞLU G., ÖZKOP E., BENLİ E., TURHAL M., YAZGAN A., DANAYİYEN Y., ÖZTÜRK M., Project Supported by Higher Education Institutions, Yenilikçi Laboratuvar Yaklaşımlarının Elektrik Elektronik Mühendisliği Eğitimine Uygulanması, 2022 - Continues

Altaş İ. H., Ayas M. Ş., Baysal Y. A., Danayiyen Y., Özgeç B., TUBITAK Project, Grid/Load Integration of Photovoltaic Systems with shadow effect for Energy Continuity, 2023 - 2026

DANAYİYEN Y., BAYRAKLI N., AKSOY A., Project Supported by Higher Education Institutions, Metasezgisel Algoritma Tabanlı +270V ve -270V DA Mikroşebeke Tasarımı ve Kontrolü, 2024 - 2024

Danayiyen Y., Tüysüz M., Şahin E., Project Supported by Higher Education Institutions, Yeni Nesil Elektrikli Araç Teknolojilerine Yönelik Nitelikli Eleman Yetiştirilmesi için Bir Stüdyo Tarzı Laboratuvarın Tasarımı, 2023 - 2024

Altaş İ. H., Danayiyen Y., TUBITAK Project, Belirsizlik İçeren Kesintisiz Güç Kaynaklarında Model Öngörülü Kontrol Uygulamaları, 2019 - 2020

Altaş İ. H., TUBITAK Project, Şebeke Bağlantılı Fv Güneş Enerji Sistemine Sahip Konutlarda Akıllı Güç Tüketimi Ve Enerji Yönetimi, 2016 - 2018

Patent

Danayiyen Y., Altaş İ. H., Farklı Alternatif Akım Çıkışlarına Sahip Modüler Kesintisiz Güç Kaynağı, Utility Model, CHAPTER H Electricity, The Invention Registration Number: 18034-99 , Standard Registration, 2024

Student Project

R & D Project, Hava Araçları için DA Mikro Şebeke Tasarımı, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, Turkey, 2023 - 2024

R & D Project, Elektrikli Araçlar İçin 48V DA Mikro Şebeke Tasarımı, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, Turkey, 2023 - 2024

R & D Project, Güneş Enerjisi ile Çalışan Topraksız Tarım Ünitesi, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, Turkey, 2023 - 2024

R & D Project, Dalga Enerjisinden Elektrik Üretimi, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, Turkey, 2022 - 2023

R & D Project, Kapalı Alanda Konumlama ile Navigasyon, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, Turkey, 2022 - 2023

R & D Project, Arşimet Vidası Mikro Hidroelektrik Santrali, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, Turkey, 2022 - 2023

Memberships / Tasks in Scientific Organizations

IEEE Control System Society Membership, Member, 2019 - Continues, Turkey

Elektrik Mühendisleri Odası, Member, 2009 - Continues, Turkey

Scientific Refereeing

INTERNATIONAL JOURNAL OF CONTROL, AUTOMATION AND SYSTEMS, SCI Journal, December 2022

INTERNATIONAL JOURNAL OF CONTROL, AUTOMATION AND SYSTEMS, SCI Journal, October 2022

INTERNATIONAL JOURNAL OF CONTROL, AUTOMATION AND SYSTEMS, SCI Journal, June 2022

INTERNATIONAL JOURNAL OF CONTROL, AUTOMATION AND SYSTEMS, SCI Journal, April 2022

IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, SCI Journal, January 2021

INTERNATIONAL JOURNAL OF CONTROL, AUTOMATION AND SYSTEMS, SCI Journal, September 2020
INTERNATIONAL JOURNAL OF CONTROL, AUTOMATION AND SYSTEMS, SCI Journal, May 2020
INTERNATIONAL JOURNAL OF CONTROL, AUTOMATION AND SYSTEMS, SCI Journal, April 2020
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, March 2017

Tasks In Event Organizations

Danayiyen Y., YENİLENEBİLİR ENERJİ SİSTEMLERİ KİŞİ OKULU, Scientific Congress, Afyonkarahisar, Turkey, Ocak 2024
Danayiyen Y., RAYLI SİSTEMLER KONGRE VE SERGİSİ, Scientific Congress, Eskişehir, Turkey, Kasım 2023

Scientific Research / Working Group Memberships

Cost Action Ca20109, Modular Energy Islands For Sustainability And Resilience (Modenerlands), COST-European Cooperation in Science and Technology, Portugal, <https://modenerlands.eu/>, 2022 - Continues
Ca21104 - Pan-European Network For Sustainable Hydropower (Pen@Hydropower), COST-European Cooperation in Science and Technology, Turkey, <https://www.pen-hydropower.eu/>, 2022 - Continues
Ca19108 - High-Temperature Superconductivity For Accelerating The Energy Transition, COST-European Cooperation in Science and Technology, Belgium, <https://www.cost.eu/>, 2020 - Continues
Digital Control System Laboratory (Dcsl), Seoul National University of Science and Technology, South Korea, <http://mpc.seoultech.ac.kr/>, 2017 - Continues
Power Energy And Control Research Laboratory, Karadeniz Technical University, Turkey, <http://www.powencon.com/>, 2014 - Continues

Metrics

Publication: 21

Congress and Symposium Activities

Control of Smart Grid and Renewable Energy Systems (CSGRES 2019), Attendee, Jeju-Si, South Korea, 2019
Dünya Enerji Konseyi Türk Milli Komitesi VI. Gençlik ve Enerji Çalıştayı, Attendee, Ankara, Turkey, 2013

Scholarships

TÜBİTAK 2214A Doktora Sırası Araştırma Bursu, TÜBİTAK, 2017 - 2018

Non Academic Experience

Serkan İnşaat
Sıkada Elektrik Tic. San. Ltd