

Doç. Dr. OĞUZHAN KARAHAN

Kişisel Bilgiler

İş Telefonu: [+90 262 303 3367](tel:+902623033367)

E-posta: oguzhan.karahan@kocaeli.edu.tr

Web: <https://avesis.kocaeli.edu.tr/2017>

Uluslararası Araştırmacı ID'leri

ORCID: 0000-0003-3588-0354

Publons / Web Of Science ResearcherID: F-7298-2018

ScopusID: 25928406600

Yoksis Araştırmacı ID: 253967

Eğitim Bilgileri

Doktora, Kocaeli Üniversitesi, Mühendislik Fakültesi, Elektronik ve Haberleşme Mühendisliği, Türkiye 2007 - 2012

Yüksek Lisans, Kocaeli Üniversitesi, Mühendislik Fakültesi, Mekatronik Mühendisliği, Türkiye 2004 - 2007

Lisans, Kocaeli Üniversitesi, Teknik Eğitim Fakültesi, Elektronik ve Bilgisayar Eğitimi, Türkiye 1996 - 2001

Yaptığı Tezler

Doktora, Seri ve paralel robotlarda parçacık sürü optimizasyonu ile yörünge kontrolörü tasarımı, Kocaeli Üniversitesi, Fen Bilimleri Enstitüsü, Elektronik Ve Haberleşme Mühendisliği (Dr), 2012

Yüksek Lisans, S60 robotunun dinamik modelinin çıkarılması, Kocaeli Üniversitesi, Fen Bilimleri Enstitüsü, Mekatronik Mühendisliği (YI), 2007

Araştırma Alanları

Kontrol ve Sistem Mühendisliği, Robotik ve Mekatronik Sistemler, Sistem Dinamiği ve Kontrolü, Robotik, Dinamik Sistemlerin Modellenmesi ve Benzetimi

Akademik Unvanlar / Görevler

Dr. Öğr. Üyesi, Kocaeli Üniversitesi, Mühendislik Fakültesi, Elektronik ve Haberleşme Mühendisliği, 2018 - Devam Ediyor

Yrd. Doç. Dr., Kocaeli Üniversitesi, Mühendislik Fakültesi, Elektronik ve Haberleşme Mühendisliği, 2016 - 2018

Akademik İdari Deneyim

Bölüm Başkan Yardımcısı, Kocaeli Üniversitesi, Mühendislik Fakültesi, Elektronik ve Haberleşme Mühendisliği, 2022 - Devam Ediyor

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Swarm Intelligence Based Nonlinear Friction and Dynamic Parameters Identification for a 6-DOF Robotic Manipulator**
KARAHAN O., Karci H.
JOURNAL OF INTELLIGENT & ROBOTIC SYSTEMS, cilt.108, sa.2, 2023 (SCI-Expanded)
- II. **Optimal trajectory generation in joint space for 6R industrial serial robots using cuckoo search algorithm**
KARAHAN O., Karci H., TANGEL A.
INTELLIGENT SERVICE ROBOTICS, cilt.15, sa.5, ss.627-648, 2022 (SCI-Expanded)
- III. **Real-time trajectory tracking control of Stewart platform using fractional order fuzzy PID controller optimized by particle swarm algorithm**
Bingül Z., Karahan O.
INDUSTRIAL ROBOT-THE INTERNATIONAL JOURNAL OF ROBOTICS RESEARCH AND APPLICATION, cilt.49, sa.4, ss.708-725, 2022 (SCI-Expanded)
- IV. **Control and Robust Stabilization at Unstable Equilibrium by Fractional Controller for Magnetic Levitation Systems**
Ataşlar-Ayyıldız B., Karahan O., Yılmaz S.
FRACTAL AND FRACTIONAL, cilt.5, sa.3, 2021 (SCI-Expanded)
- V. **Design of optimal fractional order fuzzy PID controller based on cuckoo search algorithm for core power control in molten salt reactors**
KARAHAN O.
PROGRESS IN NUCLEAR ENERGY, cilt.139, 2021 (SCI-Expanded)
- VI. **A novel performance criterion approach to optimum design of PID controller using cuckoo search algorithm for AVR system**
Bingül Z., Karahan O.
Journal of the Franklin Institute, cilt.355, ss.5534-5559, 2018 (SCI-Expanded)
- VII. **Comparison of PID and FOPID controllers tuned by PSO and ABC algorithms for unstable and integrating systems with time delay**
Bingül Z., Karahan O.
Optimal Control Applications and Methods, cilt.39, ss.1431-1450, 2018 (SCI-Expanded)
- VIII. **Fractional PID controllers tuned by evolutionary algorithms for robot trajectory control**
Bingül Z., Karahan O.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, cilt.20, ss.1123-1136, 2012 (SCI-Expanded)
- IX. **Dynamic identification of Staubli RX-60 robot using PSO and LS methods**
Bingül Z., Karahan O.
EXPERT SYSTEMS WITH APPLICATIONS, cilt.38, ss.4136-4149, 2011 (SCI-Expanded)
- X. **A Fuzzy Logic Controller tuned with PSO for 2 DOF robot trajectory control**
Bingül Z., Karahan O.
EXPERT SYSTEMS WITH APPLICATIONS, cilt.38, ss.1017-1031, 2011 (SCI-Expanded)

Diğer Dergilerde Yayınlanan Makaleler

- I. **Design of Smart Bin based on C# Through Raspberry PI**
Karahan O., Beder B.
Journal of Eskisehir Turkish World Application and Research Center (ESTUDAM) Informatics, cilt.4, sa.1, ss.1-7, 2023 (Hakemli Dergi)
- II. **Time-optimal trajectory generation in joint space for 6R industrial serial robots using Cuckoo search algorithm**
Karahan O., Karci H., Tangel A.
Global Journal of Computer Sciences: Theory and Research, cilt.12, sa.1, ss.42-54, 2022 (Hakemli Dergi)

- III. **Mobile Robot Position Controlling System Based On IoT Through Raspberry Pi**
Karahan O., Hökelek H.
Journal of Intelligent Systems: Theory and Applications, cilt.3, sa.2, ss.25-30, 2020 (Hakemli Dergi)
- IV. **Raspberry Pi Firewall and Intrusion Detection System**
Karahan O., Kaya B.
Journal of Intelligent Systems: Theory and Applications, cilt.3, sa.2, ss.21-24, 2020 (Hakemli Dergi)
- V. **CONTROLLER TUNING APPROACH WITH TLBO ALGORITHM FOR THE AUTOMATIC VOLTAGE REGULATOR SYSTEM**
Ayyıldız B., Karahan O.
Eskişehir Technical University Journal of Science and Technology A - Applied Sciences and Engineering, cilt.21, sa.1, ss.128-146, 2020 (Hakemli Dergi)
- VI. **Design of a MAGLEV System with PID Based Fuzzy Control Using CS Algorithm**
Ataslar-Ayyıldız B., Karahan O.
CYBERNETICS AND INFORMATION TECHNOLOGIES, cilt.20, sa.5, ss.5-19, 2020 (ESCI)
- VII. **APPLICATION OF MULTI-OBJECTIVE CONTROLLER TO OPTIMAL TUNING OF PID PARAMETERS FOR DIFFERENT PROCESS SYSTEMS USING CUCKOO SEARCH ALGORITHM**
Karahan O., Ayyıldız B.
Anadolu University Journal of Science and Technology-A Applied Sciences and Engineering, cilt.20, ss.1-16, 2019 (Hakemli Dergi)

Kitap & Kitap Bölümleri

- I. **Optimized PID Based Controllers for Improving Transient and Steady State Response of Maglev System**
Karahan O., Ayyıldız B.
Advances in Engineering Research, Victoria M. Petrova, Editör, Nova Science Publishers, New-York, ss.149-185, 2020
- II. **Swarm intelligence for controller tuning and control of fractional systems**
Bingül Z., Karahan O.
Swarm Intelligence - Volume 3: Applications, Ying Tan, Editör, The Institution of Engineering and Technology, London, ss.245-281, 2018
- III. **Dynamic Modeling and Simulation of Stewart Platform**
Bingül Z., Karahan O.
Serial and Parallel Robot Manipulators: Kinematic Dynamics, Control and Optimization, Serdar Küçük, Editör, INTECH Open, Rijeka, ss.19-41, 2012

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **Intrusion detection system using Optimized Machine Learning Algorithms for cyberattacks in the Internet of Vehicles (IoV)**
Diallo M. K., Karahan O.
Cognitive Models and Artificial Intelligence Conference Proceedings, İstanbul, Türkiye, 25 - 26 Mayıs 2024, ss.13-19
- II. **Hyperparameter Optimization for A Hybrid CNN-LSTM-based Intrusion Detection System**
Ayyıldız P., Karahan O.
Cognitive Models and Artificial Intelligence Conference Proceedings, İstanbul, Türkiye, 25 - 26 Mayıs 2024, ss.7-12
- III. **IOT-Based Robot Controlling Using Raspberry Pi**
Karahan O., Hökelek H.
Proceedings of 10th International Symposium on Intelligent Manufacturing and Service Systems, Sakarya, Türkiye, 9 - 11 Eylül 2019, ss.706-716

- IV. **Design and Control of the Two-wheeled Self-Balancing Robot Using Microcontroller**
Özcan B. C., Karahan O., Ayyıldız B.
Proceedings of 10th International Symposium on Intelligent Manufacturing and Service Systems, Sakarya, Türkiye, 9 - 11 Eylül 2019, ss.897-904
- V. **Raspberry Pi Firewall and Intrusion Detection System**
Karahan O., Kaya B.
Proceedings of 10th International Symposium on Intelligent Manufacturing and Service Systems, Sakarya, Türkiye, 9 - 11 Eylül 2019, ss.523-529
- VI. **Trajectory Tracking for The Magnetic Ball Levitation System via Fuzzy PID Control Based on CS Algorithm**
AYYILDIZ B., KARAHAN O.
International Symposium on Innovations in Intelligent Systems and Applications, INISTA 2019, 3 - 05 Temmuz 2019
- VII. **Optimal Design of Fuzzy PID Controller with CS Algorithm for Trajectory Tracking Control**
Karahan O., Ayyıldız B.
Science and Information Conference SAI 2018: Intelligent Computing, London, Birleşik Krallık, 10 - 12 Temmuz 2018, cilt.858, ss.174-188
- VIII. **Tuning of Fractional Order PID Controller using CS Algorithm for Trajectory Tracking Control**
Ayyıldız B., Karahan O.
6th International Conference on Control Engineering Information Technology - CEIT 2018, İstanbul, Türkiye, 25 - 27 Ekim 2018, ss.251-256
- IX. **Fractional Order Fuzzy PID Tracking Control of Stewart Platform Using PSO**
Karahan O., Bingül Z.
6th International Conference on Control Engineering Information Technology - CEIT 2018, İstanbul, Türkiye, 25 - 27 Ekim 2018
- X. **Kalman Filtresi İle PID Denetleyicinin Yüz Takibi Sistemine Uygulanması**
KARAHAN O., AYYILDIZ B.
OTOMATİK KONTROL ULUSAL TOPLANTISI, Türkiye, 21 - 23 Eylül 2017
- XI. **RRP Robotunun PSO Tabanlı Kesir Dereceli PID Kontrolü**
KARAHAN O., ÖZTÜRK S.
OTOMATİK KONTROL ULUSAL TOPLANTISI, Türkiye, 21 - 23 Eylül 2017
- XII. **Parçacık Sürüsü Optimizasyonu Kullanılarak Dönel Ters Sarkaç Sisteminin Bulanık Mantık Tabanlı PID Kontrolü**
KARAHAN O., AYYILDIZ B.
OTOMATİK KONTROL ULUSAL TOPLANTISI, Türkiye, 21 - 23 Eylül 2017
- XIII. **Tuning of fractional PID controllers using PSO algorithm for robot trajectory control**
Bingül Z., Karahan O.
2011 IEEE International Conference on Mechatronics, ICM 2011, İstanbul, Türkiye, 13 - 15 Nisan 2011, ss.955-960
- XIV. **Yüksek Hassasiyetli Stewart Platformunun Kesir Dereceli PID Yöntemiyle Konum Kontrolü ve Yörünge Takibi**
Karahan O., Kızır S., Bingül Z.
TOK2010, İstanbul, Türkiye, 21 - 23 Eylül 2010
- XV. **Modelling and Identification of STAUBLI RX-60 Robot**
KARAHAN O., Bingül Z.
IEEE Conference on Robotics, Automation and Mechatronics, Chengdu, Çin, 21 - 24 Eylül 2008, ss.184-189

Metrikler

Yayın: 38

Atf (WoS): 527

Atif (Scopus): 766

H-índeks (WoS): 8

H-índeks (Scopus): 11