

## Asst. Prof. Onur AKBATI

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAZ-8639-2020

ScopusID: 55560946700

Yoksis Researcher ID: 174515

### Education Information

Doctorate, Yildiz Technical University, Elektrik Elektronik , Elektrik Mühendisliği / Kontrol Ve Otomasyon Anabilimdalı, Turkey 2008 - 2013

Postgraduate, Yildiz Technical University, Faculty Of Electrical & Electronics, Elektrik Mühendisliği / Kontrol Ve Otomasyon Anabilimdalı, Turkey 2005 - 2007

Undergraduate, Yildiz Technical University, Faculty Of Electrical & Electronics, Elektrik Mühendisliği, Turkey 2001 - 2005

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Çoklu mobil robotların koordinasyonu, Yildiz Technical University, Faculty Of Electrical & Electronics, 2013

Postgraduate, Çizgi takip robotunun modellenmesi ve denetleyici tasarımı, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, 2008

### Academic Titles / Tasks

Assistant Professor, Yildiz Technical University, Faculty Of Electrical & Electronics, Control And Automation Engineering, 2019 - Continues

Research Assistant, Yildiz Technical University, Faculty Of Electrical & Electronics, Control And Automation Engineering, 2011 - 2019

Research Assistant, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, 2005 - 2011

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

- I. **Stability analysis of connected vehicles with V2V communication and time delays: CTCR method via Bezout's resultant**  
Akkaya S., AKBATI O., Ergenç A. F.  
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.43, no.8, pp.1802-1829, 2021 (SCI-Expanded)
- II. **Hardware-in-the-loop simulation and implementation of a fuzzy logic controller with FPGA: case study of a magnetic levitation system**  
Akbati O., Uzgun H. D., Akkaya S.  
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.41, pp.2150-2159, 2019 (SCI-Expanded)
- III. **Design and implementation of an adaptive backstepping controller for a magnetic levitation system**  
Adıguzel F., Dokumacılar E., Akbati O., Türker T.  
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.40, no.8, pp.2466-2475, 2018 (SCI-Expanded)
- IV. **Ethernet-based automation network systems mobile laboratory: a case study in nonlinear control of water tank system**  
Ucun L., Akbati O., Cansever G.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.23, pp.2344-2357, 2015 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Arm Based Modbus TCP Distributed Input-Output Device Design with Updatable Firmware Via Modbus TCP Communication Protocol**  
Demirbaş B., Akbati O.  
International Journal of Electrical, Electronics and Data Communication (IJEEDC), vol.10, no.4, pp.1-5, 2022 (Peer-Reviewed Journal)
- II. **MODBUS GATEWAY DESIGN USING ARM MICROPROCESSOR**  
Karaca S., Akbati O.  
International Journal of Electrical, Electronics and Data Communication, vol.9, no.7, pp.13-17, 2021 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Dört Pervaneli İnsansız Hava Araçlarının Konum ve Yönelim Kontrolü için Doğrusal Olmayan Ayrık Zamanlı Kontrolcü Tasarımı**  
Kurtuluş K., Akbati O., Adıgüzel F.  
Otomatik Kontrol Ulusal Toplantısı (TOK'2023), İstanbul, Turkey, 14 - 16 September 2023, pp.1-6
- II. **Reduction of Quadrant Glitch: An Experimental Validation on XY Positioning Table**  
Cicek E., Türker T., AKBATI O., Sancak K. V.  
2023 Advances in Science and Engineering Technology International Conferences, ASET 2023, Dubai, United Arab Emirates, 20 - 23 February 2023
- III. **A Discrete-Time Trajectory Tracking Controller for an Underactuated Quadrotor UAV**  
ADIGÜZEL F., KURTULUŞ K., AKBATI O.  
11th IEEE International Conference on Systems and Control, ICSC 2023, Sousse, Tunisia, 18 - 20 December 2023, pp.464-469
- IV. **Savaş Uçağı Boylamsal Eksen Optimal Kontrolü ve Gözleyici Tasarımı**  
Macit M. F., Akbati O.  
3.ULUSLARARASI MÜHENDİSLİK VE MİMARLIK KONGRESİ, Diyarbakır, Turkey, 28 - 29 May 2022, pp.77-89

- V. **A Comparative Study between Linear and Non-linear Control Methodologies for Induction Motor**  
Haşimi M., Akbati O.  
Industrial Engineering and Operations Management, İstanbul, Turkey, 7 - 10 March 2022, pp.1-11
- VI. **Asymmetric S-Curve Generation and Tracking Under Motion Constraints: An Experimental Validation**  
Cicek E., Turker T., AKBATI O., Vedat Sancak K.  
2022 Advances in Science and Engineering Technology International Conferences, ASET 2022, Dubai, United Arab Emirates, 21 - 24 February 2022
- VII. **Araç Konvoy Sistemlerinin Zaman Gecikmesi Altında Kararlılık Analizi ve Benzetim Çalışmaları**  
AKKAYA Ş., AKBATI O., ERGENÇ A. F.  
Türk Otomatik Kontrol Komitesi (TOK2019), Muğla, Turkey, 11 - 14 September 2019
- VIII. **Birinci ve İkinci Dereceden Sistem Dinamikleri ile Modellenen İki Tekerlekli Mobil Robotların Eş Zamanlı Kontrolü**  
AKKAYA Ş., AKBATI O., ERGENÇ A. F.  
Türk Otomatik Kontrol Komitesi TOK2018, Kayseri, Turkey, 12 - 14 September 2018
- IX. **Consensus Control of Mobile Agents with Obstacle Avoidance using Collision Cone Approach**  
Akkaya S., AKBATI O., Ergenç A. F.  
6th International Conference on Control Engineering and Information Technology (CEIT), İstanbul, Turkey, 25 - 27 October 2018
- X. **Design and Application of FPGA Based Modbus Gateway Module**  
AKKAYA Ş., AKBATI O., ERGENÇ A. F.  
ICENTE'17 International Conference on Engineering Technologies, Konya, Turkey, 7 - 09 December 2017, pp.514-519
- XI. **FPGA için Bulanık Mantık Kontrolcüsü Tasarımı, İkinci ve Üçüncü Dereceden Doğrusal Sistemler ile Donanım Tabanlı Benzetim Çalışmaları**  
AKKAYA Ş., Üzgün H. D., AKBATI O.  
TOK '17 Otomatik Kontrol Türk Milli Komitesi Ulusal Toplantısı, Turkey, 21 - 23 September 2017
- XII. **Fuzzy logic controller implementation with FPGA in the loop simulation**  
Akkaya Ş., Üzgün H. D., AKBATI O.  
2017 International Conference on Mechatronics Systems and Control Engineering, ICMSCE 2017, Kayseri, Turkey, 2 - 04 February 2017, pp.33-37
- XIII. **Endüstriyel Sistemler için FPGA Tabanlı Modbus Ağ Geçidi Tasarımı ve Uygulaması**  
Akkaya Ş., Akbati O., Ergenç A. F.  
Otomatik Kontrol Ulusal Toplantısı, TOK'2015, Denizli, Turkey, 10 - 12 September 2015, vol.1, no.235, pp.445-451
- XIV. **Multiple Closed Loop System Control with Digital PID Controller Using FPGA**  
Akkaya S., AKBATI O., Gorgun H.  
International Conference on Control, Decision and Information Technologies (CoDIT), Metz, France, 3 - 05 November 2014, pp.764-769
- XV. **Control of Pattern Tracking Nonholonomic Mobile Robot with Feedback Linearization**  
AKBATI O., Cansever G.  
8th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 28 - 30 November 2013, pp.512-515
- XVI. **CoNeT Mobile Laboratory for Ethernet Based I/O Systems in Industrial Applications**  
UCUN L., AKBATI O., Cansever G.  
12th International Conference on Control, Automation and Systems (ICCAS), Jeju, South Korea, 17 - 21 October 2012, pp.18-22
- XVII. **Çizgi Takip Robotunun Modellenmesi ve Denetleyici Tasarımı**  
AKBATI O., Cansever G.  
Otomatik Kontrol Ulusal Toplantısı, 01 November 2008

## Supported Projects

Akbati O., Project Supported by Other Private Institutions, ALTINAY GELİŞMİŞ HAREKET KONTROLÖR PROJESİ, 2021 - 2022

Akbati O., Project Supported by Other Private Institutions, ATIK SU DENETİM VE OTOMASYON SİSTEMİ'NİN GELİŞTİRİLMESİ 4. FAZ, 2021 - 2022

Akbati O., Project Supported by Other Private Institutions, ATIK SU DENETİM VE OTOMASYON SİSTEMİ'NİN GELİŞTİRİLMESİ 3. FAZ, 2020 - 2021

Akbati O., Türker T., Delibaşı A., TUBITAK Project, Design and Real-Time Implementation of Four-Rotor Unmanned Aerial Vehicles for Aggressive Maneuverability, 2018 - 2021

Akbati O., Project Supported by Other Private Institutions, ALTINAY İnsansı Robot AIR, 2020 - 2020

TÜRKER T., GÖRGÜN H., AKTEKİN Ö., AKBATI O., EREN Y., Other International Funding Programs, Hız kestirimi için gözleyici tasarımı ve çıkış geri beslemeli denetleyici tasarımı ve uygulamaları, 2012 - 2013

Cansever G., Uzun L., Akbati O., EU Supported Other Project, Co-Operative Network Training (CONET), 2009 - 2012

## Metrics

Publication: 23

Citation (WoS): 11

Citation (Scopus): 31

H-Index (WoS): 2

H-Index (Scopus): 3

## Non Academic Experience

Teksan Jeneratör