

## Asst. Prof. YEŐİM AYSEL BAYSAL ASLANHAN

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAJ-7522-2021

ScopusID: 57188814771

Yoksis Researcher ID: 55710

### Education Information

Doctorate, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, Turkey 2016 - 2022

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Kontrol Ve Otomasyon Mühendisliđi, Turkey 2017 - 2017

Postgraduate, Karadeniz Technical University, -, Elektrik-Elektronik Mühendisliđi, Turkey 2012 - 2016

Undergraduate, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik- Elektronik Mühendisliđi, Turkey 2007 - 2012

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, LEARNING-BASED ADAPTIVE MOTION CONTROL OF A SNAKE ROBOT, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, 2022

Postgraduate, DAĐITIM ŐEBEKELERİNDE GÜÇ KALİTESİ İÇİN OPTİMUM KAPASİTÖR YERİNİN VE DEĐERİNİN BELİRLENMESİ , Karadeniz Technical University, -, Elektrik-Elektronik Mühendisliđi, 2016

### Research Areas

Controllers, Optimal Control, Robotics and Mechatronics Systems, Mechatronic Systems, Route and Motion Planning, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, 2023 - Continues

Research Assistant, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, 2012 - 2023

## Academic and Administrative Experience

Visiting researcher, Aalborg Universitet (Aalborg University), Department Of Electronic Systems, The Technical Faculty Of It And Design, Automation & Control, 2019 - 2019

## Courses

Akıllı Kontrol Sistemleri, Undergraduate, 2022 - 2023

Bitirme Projesi, Undergraduate, 2022 - 2023

Bulanık Mantık, Undergraduate, 2022 - 2023

Mühendislik Tasarımı, Undergraduate, 2022 - 2023

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

- I. **A Fast Non-dominated Sorting Multi-objective Symbiotic Organism Search Algorithm for Energy Efficient Locomotion of Snake Robot**  
Baysal Y., Altas I.  
COMPUTER SCIENCE AND INFORMATION SYSTEMS, vol.19, no.1, pp.353-378, 2022 (SCI-Expanded)
- II. **Multi-objective symbiotic organism search algorithm for optimal feature selection in brain computer interfaces**  
BAYSAL Y. A., Ketenci S., ALTAŞ İ. H., KAYIKÇIOĞLU T.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.165, 2021 (SCI-Expanded)
- III. **Modelling and Simulation of a Wheel-Less Snake Robot**  
BAYSAL Y. A., ALTAŞ İ. H.  
2020 7TH INTERNATIONAL CONFERENCE ON ELECTRICAL AND ELECTRONICS ENGINEERING (ICEEE 2020), pp.285-289, 2020 (SCI-Expanded)

## Articles Published in Other Journals

- I. **POWER QUALITY IMPROVEMENT VIA OPTIMAL CAPACITOR PLACEMENT IN ELECTRICAL DISTRIBUTION SYSTEMS USING SYMBIOTIC ORGANISMS SEARCH ALGORITHM**  
BAYSAL Y. A., ALTAŞ İ. H.  
Mugla Journal of Science and Technology, vol.3, no.1, pp.64-68, 2017 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Deep Reinforcement Learning-Based Intelligent Torpedo for Target Tracking**  
Ceylan H. N., Bulut O. B., Karakoç T., Birinci Ö. S., Baysal Aslanhan Y. A.  
2024 Innovations in Intelligent Systems and Applications Conference (ASYU), Ankara, Turkey, 16 - 18 October 2024, pp.1-5
- II. **Optimally Efficient Locomotion of Snake Robot**  
Baysal Y. A., Altaş İ. H.  
2020 International Conference on INnovations in Intelligent SysTems and Applications (INISTA), Novi-Sad, Serbia And Montenegro, 24 - 26 August 2020, pp.1-6
- III. **Adaptive Snake Robot Locomotion in Different Environments**  
BAYSAL Y. A., ALTAŞ İ. H.  
4th International Conference on Control, Automation and Diagnosis (ICCAD), Paris, France, 7 - 09 October 2020, pp.218-223
- IV. **Optimal PV Generation Using Symbiotic Organisms Search Optimization Algorithm-Based MPPT**

AKPOLAT A. N., BAYSAL Y. A., Yang Y., Blaabjerg F.

46th Annual Conference of the IEEE-Industrial-Electronics-Society (IECON), ELECTR NETWORK, 19 - 21 October 2020, pp.2850-2855

V. **Simbiyotik Organizmalar Arama Algoritması İle Dağıtım Şebekelerinde Güç Kayıplarının Azaltılması**  
Baysal Y. A., Altaş İ. H., Gedikli E.

Akıllı Sistemlerde Yenilikler ve Uygulamaları (ASYU) Sempozyumu, Düzce, Turkey, 29 September - 01 October 2016

VI. **Cuckoo Search Algorithm for Power Loss Minimization by Optimal Capacitor Allocation in Radial Power Systems**

BAYSAL Y. A., ALTAŞ İ. H.

International Symposium on Innovations in Intelligent Systems and Applications (INISTA), Sinaia, Romania, 2 - 05 August 2016

VII. **A Fuzzy Reasoning Approach for Optimal Location and Sizing of Shunt Capacitors in Radial Power Systems**

BAYSAL Y. A., ALTAŞ İ. H.

IEEE Energy Conversion Congress and Exposition (ECCE), Montreal, Canada, 18 - 24 September 2015, pp.5838-5842

## Supported Projects

BAYSAL ASLANHAN Y. A., GÖZÜKÜÇÜK M., KARADENİZ E. F., Project Supported by Higher Education Institutions, Mobil Robotlar için Derin Pekiştirmeli Öğrenme Tabanlı Otonom Navigasyon, 2024 - Continues

BAYSAL ASLANHAN Y. A., CEYLAN H. N., BULUT O. B., BİRİNCİ Ö. S., KARAKOÇ T., Project Supported by Higher Education Institutions, Torpido Savunma Sistemlerine Karşı Derin Pekiştirme Öğrenme Tabanlı Akıllı Torpido, 2024 - Continues

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

Baysal Y. A., Kılıç G. Y., Kurt M., Bayat M. S., TUBITAK Project, Enerji Verimli Adaptif Hareket Edebilen Yılan Robot, 2023 - 2024

## Metrics

Publication: 11

Citation (WoS): 25

Citation (Scopus): 37

H-Index (WoS): 2

H-Index (Scopus): 4

## Scholarships

2211-C Öncelikli Alanlara Yönelik Doktora Burs Programı, TUBITAK, 2018 - Continues

## Awards

BAYSAL Y. A., 2224-A - Yurt Dışı Bilimsel Etkinliklere Katılma Desteği, TÜBİTAK-BİDEB, August 2016