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Personal Information

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International Researcher IDs

ScholarID: [uxfC-6YAAAAJ](https://orcid.org/0000-0003-0302-8466)

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ScopusID: 57224480217

Yoksis Researcher ID: 265818

Education Information

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, --, Turkey 2019 - Continues

Postgraduate, Karabuk University, Fen Bilimleri Enstitüsü, Mechatronics Engineering, Turkey 2016 - 2019

Undergraduate, Erciyes University, Mühendislik Fakültesi, Mekatronik Mühendisliği, Turkey 2010 - 2015

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Vocational Training, Online Mühendislik Zirvesi, Kuantum Organization, 2021

Vocational Training, KUKA Robot Ailesi Semineri , Erciyes University Engineerin Faculty, 2014

Vocational Training, ABB PLC, Panel ve İnventer Ürünleri Semineri , Erciyes University Engineering Faculty, 2014

Vocational Course, Mikrodeneleyici Programlama Kursu , Hürriyet Technical and Industrial Vocational High School , 2013

Vocational Course, PLC Programlama Teknikleri Kursu , Hürriyet Technical and Industrial Vocational High School, 2012

Dissertations

Postgraduate, Industrial Robotic Arm Which Performs Pick And Place Task Based On Image Processing, Karabuk University, Fen Bilimleri Enstitüsü, Mechatronics Engineering, 2019

Research Areas

Computer Vision, Mechatronic Systems, algorithms, Robotics, Optimization

Academic Titles / Tasks

Research Assistant, Erciyes University, Fen Bilimleri Enstitüsü, 2019 - Continues

Research Assistant, Nigde Omer Halisdemir University, Faculty Of Engineering, Department Of Mechatronics Engineering, 2017 - 2019

Academic and Administrative Experience

Department Web Manager, Erciyes University, Mühendislik Fakültesi, Mekatronik Mühendisliği, 2021 - Continues

1st Class Counseling, Erciyes University, Mühendislik Fakültesi, Mekatronik Mühendisliği, 2020 - Continues

Member of Internship Committee, Erciyes University, Mühendislik Fakültesi, Mekatronik Mühendisliği, 2020 - Continues

Courses

Mechatronics Laboratory I, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020

Basic Electircal Circuit Laboratory, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Multi-strategy and self-adaptive differential sine-cosine algorithm for multi-robot path planning**
Akay R., Yildirim M. Y.
EXPERT SYSTEMS WITH APPLICATIONS, vol.232, pp.1-19, 2023 (SCI-Expanded)
- II. **Application of hybrid metaheuristic with Levenberg-Marquardt algorithm for 6-dimensional magnetic localization**
Suveren M., Akay R., Yildirim M. Y., Kanaan M.
EVOLVING SYSTEMS, vol.13, no.6, pp.849-867, 2022 (SCI-Expanded)
- III. **Fast path planning in multi-obstacle environments for mobile robots**
Yildirim M. Y., Akay R.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.36, no.3, pp.1552-1564, 2021 (SCI-Expanded)

Articles Published in Other Journals

- I. **Robot Tutucu Problemi için Çok Stratejili Aritmetik Optimizasyon Algoritması**
YILDIRIM M. Y., AKAY R.
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, 2024 (Peer-Reviewed Journal)
- II. **Comparison of Maths Based Metaheuristics for Grid Based Path Planning**
Yildirim M. Y., Akay R.
Avrupa Bilim ve Teknoloji Dergisi, no.32, pp.521-530, 2021 (Peer-Reviewed Journal)
- III. **Investigation of Linearity in Path Planning of Mobile Robot**
Yildirim M. Y., Akay R.
Avrupa Bilim ve Teknoloji Dergisi, no.24, pp.138-142, 2021 (Peer-Reviewed Journal)
- IV. **A Comparative Study of Optimization Algorithms for Global Path Planning of Mobile Robots**
Yildirim M. Y., Akay R.
Sakarya University Journal of Science, vol.25, no.2, pp.417-428, 2021 (Peer-Reviewed Journal)
- V. **Development of an Industrial Robotic Arm Education Kit Based on Object Recognition and Robot Kinematics for Engineers**
Yildirim M. Y., Anutgan M.
Journal of Selcuk-Technic, pp.47-65, 2020 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Welded Beam Design Optimization Using Honey Badger Algorithm**
YILDIRIM M. Y., AKAY R.
1. Bilsel International Aspendos Scientific Researches Congress, Antalya, Turkey, 24 - 25 February 2024, pp.59-66
- II. **Comparison of Maths-Based Metaheuristics for Grid-Based Path Planning**
Yıldırım M. Y., Akay R.
International Conference on Design, Research and Development (RDCONF2021), 15 - 18 December 2021, pp.157
- III. **Mobil Robotların Yol Planlamasında Doğrusallığın İncelenmesi**
Yıldırım M. Y., Akay R.
2nd International Conference on Access to Recent Advances in Engineering and Digitalization, Kayseri, Turkey, 10 - 12 March 2021, pp.138-142
- IV. **Real-Time Optimization of PID Controller Parameters for DC Motor Speed Control with PSO Algorithm**
Yıldırım M. Y., Akay R.
2nd International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2020), Gaziantep, Turkey, 7 - 09 October 2020, pp.543-549
- V. **Development of an Industrial Robotic Arm Education Kit Based on Object Recognition and Robot Kinematics for Engineers**
Yıldırım M. Y., Anutgan M.
9th International Conference on Advanced Technologies (ICAT 20), İstanbul, Turkey, 10 - 12 August 2020
- VI. **Object Classification using Stereo Vision and a 3-Axis Robotic Arm**
Yıldırım M. Y., Anutgan M.
Anadolu I. Uluslararası Multidisipliner Çalışmalar Kongresi, Diyarbakır, Turkey, 28 - 29 December 2018
- VII. **Simulation of Inverse Kinematic Analysis with Artificial Neural Networks**
Yıldırım M. Y., Anutgan M.
Anadolu I. Uluslararası Multidisipliner Çalışmalar Kongresi, Diyarbakır, Turkey, 28 - 29 December 2018

Supported Projects

Akay R., Yıldırım M. Y., Project Supported by Higher Education Institutions, Deep Learning Based Path Planning Optimization for Multiple Mobile Robot Systems, 2021 - 2024

Anutgan M., Yıldırım M. Y., Project Supported by Higher Education Institutions, Real-Time Image Processing Based Industrial Robot Arm with Pick-Place Capability (Master's Thesis Project), 2018 - 2019

Tasks In Event Organizations

Yıldırım M. Y., International Turkic World Congress on Science and Engineering, Scientific Congress, Niğde, Turkey, Haziran 2019

Metrics

Publication: 15

Citation (WoS): 3

Citation (Scopus): 6

H-Index (WoS): 1

H-Index (Scopus): 2

Non Academic Experience

Business Establishment Private, Aremas Özderya Elevator Elc. Const. Tourism Trd. and Indus. LC, Maintenance
Kilim Mobilya Kanepe Sanayi Ticaret A.Ş.
Atasan Metal Sanayi ve Ticaret Ltd. Şti.