

Asst. Prof. Kutluk Bilge Arıkan

Personal Information

Office Phone: [+90 312 585 0236](tel:+903125850236)

Email: kutluk.arikan@tedu.edu.tr

Web: <https://avesis.tedu.edu.tr/kutluk.arikan>

International Researcher IDs

ORCID: 0000-0003-2093-1577

Yoksis Researcher ID: 109760

Biography

Dr. Kutluk Bilge Arıkan received his BSc, MSc and PhD in mechanical engineering from the Middle East Technical University Ankara, Turkey, in 1997, 2000, and 2008 respectively. He was a research assistant from 1997 to 2003 in the same department. 2003 to 2017, he was in the Department of Mechatronics Engineering at Atilim University, as a faculty member. Since September 2017, he is currently an assistant professor in the Department of Mechanical Engineering at TED University. He participated in many research projects and served as an academic consultant for many industrial projects in the fields of automotive and robotics.

Academic Titles / Tasks

Assistant Professor, TED University, Faculty of Engineering, Department of Mechanical Engineering, 2017 - Continues
Atilim University, Mühendislik Fakültesi, Mekatronik Mühendisliği Bölümü, 2008 - 2017

Lecturer, Atilim University, Mühendislik Fakültesi, Mekatronik Mühendisliği Bölümü, 2003 - 2008

Research Assistant, Middle East Technical University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 1997 - 2003

Academic and Administrative Experience

Bölüm Tanıtım ve Mezunlarla İlişkiler Komisyonu Üyesi, TED University, Faculty Of Engineering, Department Of Mechanical Engineering, 2022 - Continues

Program Accreditation-Self-Assessment Committee Member, TED University, Faculty Of Engineering, Department Of Mechanical Engineering, 2020 - Continues

İnsan Araştırmaları Etik Kurulu, 2020 - 2023

Mekatronik Mühendisliği Yüksek Lisans Programı Anabilim Dalı Başkanı, 2018 - 2021

Courses

Dynamics, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2019 - 2020

Mechatronics, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

Modeling and Control of Dynamic Systems, Undergraduate, 2022 - 2023, 2020 - 2021, 2018 - 2019, 2017 - 2018

Master's Thesis I, Postgraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

Modern Control Engineering, Postgraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

Master's Thesis II, Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020

Master's Thesis I, Postgraduate, 2021 - 2022
Master's Thesis II, Postgraduate, 2022 - 2023
Measurement and Instrumentation, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018
Ground Vehicle Dynamics and Control, Undergraduate, 2021 - 2022
Mechatronic Systems, Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021
Pre-Thesis Seminar, Postgraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020
Numerical Methods in Engineering, Undergraduate, 2021 - 2022
Senior Project, Undergraduate, 2020 - 2021, 2018 - 2019, 2017 - 2018
Flying Robotics, Postgraduate, 2020 - 2021, 2019 - 2020
Mechanical Vibrations, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018

Jury Memberships

Doctorate, Doctorate, Orta Doğu Teknik Üniversitesi, September, 2022
Post Graduate, Post Graduate, Gebze Teknik Üniversitesi, August, 2022
Post Graduate, Post Graduate, Hacettepe Üniversitesi, August, 2022
Doctorate, Doctorate, Hacettepe Üniversitesi, June, 2022
Post Graduate, Post Graduate, Orta Doğu Teknik Üniversitesi, February, 2022

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Performance assessment of tripping and drilling operations controllers on an experimental drilling rig prototype**
Nobahar A., Arıkan K. B., Özbek M. E., Naseri B.
Geoenergy Science and Engineering, vol.226, 2023 (SCI-Expanded)
- II. **Modelling and controlling of drill string stick slip vibrations in an oil well drilling rig**
Noabahar Sadeghi A., Arıkan K. B., Özbek M. E.
Journal of Petroleum Science and Engineering, vol.216, 2022 (SCI-Expanded)
- III. **Torsional model of the drill string, and real-time prediction of the bit rotational speed and the torque on bit, in an oil well drilling tower**
Sadeghi A. N., Arıkan K. B., Özbek M. E.
Journal of Petroleum Science and Engineering, vol.195, 2020 (SCI-Expanded)
- IV. **Evaluation of the Disturbance Rejection Performance of an Aerial Manipulator**
Aydemir M., Arıkan K. B.
Journal of Intelligent and Robotic Systems: Theory and Applications, vol.97, no.3-4, pp.451-469, 2020 (SCI-Expanded)
- V. **Robust and adaptive control design of a drilling rig during the operating modes**
Nobahar Sadeghi A., Arıkan K. B., Özbek M. E., Baranoğlu B.
Measurement and Control (United Kingdom), vol.52, no.5-6, pp.702-719, 2019 (SCI-Expanded)
- VI. **Anticipatory effect of execution on observation: An approach using exopinch finger robot**
Arıkan K. B., Zadeh H. G. M., TURGUT A. E., ZİNNUROĞLU M., Bayer G., GÜNENDİ Z., CENGİZ B.
Turkish Journal of Medical Sciences, vol.49, no.4, pp.1054-1067, 2019 (SCI-Expanded)
- VII. **Analysis of mirror neuron system activation during action observation alone and action observation with motor imagery tasks**
CENGİZ B., VURALI D., ZİNNUROĞLU M., Bayer G., Golmohammadzadeh H., GÜNENDİ Z., TURGUT A. E., İrfanoğlu B., Arıkan K. B.
Experimental Brain Research, vol.236, no.2, pp.497-503, 2018 (SCI-Expanded)
- VIII. **Evaluation and optimization of nonlinear central pattern generators for robotic locomotion**

- Elbori A., Turan M., Arıkan K. B.
Control Engineering and Applied Informatics, vol.20, no.3, pp.89-98, 2018 (SCI-Expanded)
- IX. **Modelling and optimisation of an 8 × 8 heavy duty vehicle's hydro-pneumatic suspension system**
Küçük K., Yurt H. K., Arıkan K. B., Imrek H.
International Journal of Vehicle Design, vol.71, no.1, pp.122-138, 2016 (SCI-Expanded)
- X. **Cue-based aggregation with a mobile robot swarm: A novel fuzzy-based method**
Arvin F., TURGUT A. E., Bazaryari F., Arıkan K. B., Bellotto N., Yue S.
Adaptive Behavior, vol.22, no.3, pp.189-206, 2014 (SCI-Expanded)
- XI. **A test bench to study bioinspired control for robot walking**
Arıkan K. B., Irfanoğlu B.
Control Engineering and Applied Informatics, vol.13, no.2, pp.76-80, 2011 (SCI-Expanded)
- XII. **Identification of linear handling models for road vehicles**
Arıkan K. B., ÜNLÜSOY Y. S., Korkmaz I., Çelebi A.
Vehicle System Dynamics, vol.46, no.7, pp.621-645, 2008 (SCI-Expanded)

Articles Published in Other Journals

- I. **The link between learning performance, immobility in the forced swim test, and hippocampal glia**
Özcan T., SARA M. Y., Arıkan K. B., Ünal B., ÜNAL Ç. T.
Experimental Biomedical Research, vol.5, 2022 (Peer-Reviewed Journal)
- II. **A Novel Navigation Algorithm for Mapping Indoor Environments with a Quadrotor**
ORAL Ö., TURGUT A. E., ARIKAN K. B.
Hittite Journal of Science and Engineering, vol.7, no.2, pp.125-134, 2020 (Peer-Reviewed Journal)
- III. **Decoupled Cascaded PID Control of an Aerial Manipulation System**
Bulut N., Turgut A. E., Arıkan K. B.
Hittite Journal of Science and Engineering, vol.6, no.4, pp.251-259, 2019
- IV. **İki tekerlekli ve tek kollu robotik platformun kayan kipli denetimi ve parametre optimizasyonu**
KARA S. E., ARIKAN K. B.
Dicle Üniversitesi Mühendislik Fakültesi Mühendislik Dergisi, vol.10, no.2, pp.591-601, 2019 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Experimental and numerical results of a flapping wing four bar mechanism**
Senol M., Arıkan K. B., KURTULUŞ D. F.
55th AIAA Aerospace Sciences Meeting, Texas, United States Of America, 9 - 13 January 2017
- II. **Attitude and altitude stabilization of a fixed wing VTOL unmanned air vehicle**
Güçlü A., Arıkan K. B., KURTULUŞ D. F.
AIAA Modeling and Simulation Technologies Conference, 2016, Washington, United States Of America, 13 - 17 June 2016
- III. **Development of a single degree of freedom inertial measurement system**
Kara S. E., Golmohammedzadeh H., Arıkan K. B.
20th Annual International Conference on Mechatronics and Machine Vision in Practice, M2VIP 2013, Ankara, Turkey, 20 September 2013, pp.153-158
- IV. **Disturbance rejection control of a quadrotor equipped with A 2 DOF manipulator**
Aydemir M., Arıkan K. B., Irfanoğlu B.
20th Annual International Conference on Mechatronics and Machine Vision in Practice, M2VIP 2013, Ankara, Turkey, 20 September 2013, pp.26-32

Scientific Refereeing

TUBITAK Project, 1512 - Progressive Support Program for Entrepreneurship, TED University, Turkey, October 2022
JOURNAL OF INTELLIGENT AND ROBOTIC SYSTEMS THEORY AND APPLICATIONS, Journal Indexed in SCI-E, September 2022
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, TED University, Turkey, March 2022
ROBOTICS AND AUTONOMOUS SYSTEMS, August 2021
JOURNAL OF MECHANICAL SCIENCE AND TECHNOLOGY, April 2021
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, February 2021
Journal of Aerospace Science and Technology, July 2020
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, May 2020
AEROSPACE SCIENCE AND TECHNOLOGY, September 2019
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS, PART D: JOURNAL OF AUTOMOBILE ENGINEERING, April 2019
MEASUREMENT AND CONTROL, January 2019

Scientific Consultations

Nurol Makina, Ted University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Turkey, 2019 - 2020

Tasks In Event Organizations

ARIKAN K. B., ICCMA 2019, Kasım 2019

Scientific Research / Working Group Memberships

"Bioinspired robot navigation by hippocampal and striatal contributions" MSc Thesis of Youness Lahdili in the Mechatronics Engineering Graduate Program, 2019 - Continues

Awards

ARIKAN K. B., 55. Ulusal Nöroloji Kongresinde En İyi İkinci Poster Ödülü, 55. Nöroloji Kongresi, November 2019