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Personal Information

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Education Information

Doctorate, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, Turkey 2000 - 2008

Post Graduate, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, Turkey 1996 - 1999

Under Graduate, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, Turkey 1992 - 1996

Dissertations

Doctorate, Self organized flocking with a mobile robot swarm, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 2008

Post Graduate, Development of a metamorphic robotic system, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 1999

Research Areas

Robotics, Mechatronics, Modeling and Simulation of Dynamic Systems

Academic Titles / Tasks

Assistant Professor, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 2018 - Continues

Assistant Professor, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 2015 - 2018

Assistant Professor, Türk Hava Kurumu Üniversitesi, Mühendislik Fakültesi, Mekatronik Mühendisliği Bölümü, 2012 - 2013

Courses

Modern Control, Post Graduate, 2020 - 2021

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **Interaction network effects on position- and velocity-based models of collective motion**
TURGUT A. E. , Boz I. C. , Okay I. E. , Ferrante E., Huepe C.
JOURNAL OF THE ROYAL SOCIETY INTERFACE, vol.17, 2020 (Journal Indexed in SCI)

- **Anticipatory effect of execution on observation: an approach using ExoPinch finger robot**
Arikan K. B. , Zadeh H. G. M. , TURGUT A. E. , ZİNNUROĞLU M., Bayer G., GÜNENDİ Z., CENGİZ B.
TURKISH JOURNAL OF MEDICAL SCIENCES, vol.49, pp.1054-1067, 2019 (Journal Indexed in SCI)
- **Perpetual Robot Swarm: Long-Term Autonomy of Mobile Robots Using On-the-fly Inductive Charging**
Arvin F., Watson S., TURGUT A. E. , Espinosa J., Krajnik T., Lennox B.
JOURNAL OF INTELLIGENT & ROBOTIC SYSTEMS, vol.92, pp.395-412, 2018 (Journal Indexed in SCI)
- **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., ARIKAN K. B.
EXPERIMENTAL BRAIN RESEARCH, vol.236, pp.497-503, 2018 (Journal Indexed in SCI)
- **Measures of dynamism and urgency in logistics**
van Lon R. R. S. , Ferrante E., Turgut A. E. , Wenseleers T., Vanden Berghe G., Holvoet T.
EUROPEAN JOURNAL OF OPERATIONAL RESEARCH, vol.253, pp.614-624, 2016 (Journal Indexed in SCI)
- **Investigation of cue-based aggregation in static and dynamic environments with a mobile robot swarm**
Arvin F., TURGUT A. E. , Krajnik T., Yue S.
ADAPTIVE BEHAVIOR, vol.24, pp.102-118, 2016 (Journal Indexed in SCI)
- **Evolution of Self-Organized Task Specialization in Robot Swarms**
Ferrante E., TURGUT A. E. , Duenez-Guzman E., Dorigo M., Wenseleers T.
PLOS COMPUTATIONAL BIOLOGY, vol.11, 2015 (Journal Indexed in SCI)
- **Self-organized flocking in mobile robot swarms**
TURGUT A. E. , Çelikkanat H., Gökçe F., ŞAHİN E.
Swarm Intelligence, vol.2, pp.97-120, 2008 (Journal Indexed in SCI Expanded)

Articles Published in Other Journals

- **Decoupled Cascaded PID Control of an Aerial Manipulation System**
Bulut N., Turgut A. E. , Arikan K. B.
Hittite Journal of Science and Engineering, vol.6, no.1484171, pp.251-259, 2019 (National Refreed University Journal)

Refereed Congress / Symposium Publications in Proceedings

- **FLUID-STRUCTURE INTERACTION ANALYSIS OF A FOUR-BAR FLAPPING WING MECHANISM**
Beker C., TURGUT A. E. , ARIKAN K. B. , KURTULUŞ D. F.
IX ECCOMAS Thematic Conference on Smart Structures and Materials SMART 2019, Paris, France, 8 - 11 July 2019
- **Extended Artificial Pheromone System for Swarm Robotic Applications**
Na S., Raoufi M., TURGUT A. E. , Krajnik T., Arvin F.
Conference on Artificial Life (ALIFE) - How Can Artificial Life Help Solve Societal Challenges?, Newcastle-Upon-Tyne, United Kingdom, 29 July - 02 August 2019, pp.608-615
- **Online Sensor Bias Estimation & Calibration by Kalman Filtering with Adaptive Lyapunov Redesign Method**
Altintas O. H. , TURGUT A. E.
9th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 11 - 14 June 2019, pp.145-152
- **P Phi SS: An Open-Source Experimental Setup for Real-World Implementation of Swarm Robotic Systems in Long-Term Scenarios**
Arvin F., Krajnik T., TURGUT A. E.

5th International Workshop on Modelling and Simulation for Autonomous Systems (MESAS), Prague, Czech Republic, 17 - 19 October 2018, vol.11472, pp.351-364

● **phi Clust: Pheromone-based Aggregation for Robotic Swarms**

Arvin F., TURGUT A. E. , Krajnik T., Rahimi S., Okay I. E. , Yue S., Watson S., Lennox B.

25th IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Madrid, Spain, 1 - 05 October 2018, pp.4288-4294

● **Design of a Novel Foldable Flapping Wing Micro Air Vehicle**

Beker C., Arıkan K. B. , Turgut A. E. , Özcan O., Kurtuluş D. F.

Ankara International Aerospace conference, Ankara, Turkey, 20 - 22 September 2017

● **Design of a Micro Piezo Actuated Gripper for a Swarm Robotic System**

Kaygusuz B., TURGUT A. E.

13th International Conference on Informatics in Control, Automation and Robotics (ICINCO), Lisbon, Portugal, 29 - 31 July 2016, pp.534-539

● **COS Phi: Artificial Pheromone System for Robotic Swarms Research**

Arvin F., Krajnik T., TURGUT A. E. , Yue S.

IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Hamburg, Germany, 28 September - 02 October 2015, pp.407-412

● **Guiding a Robot Flock via Informed Robots**

Celikkanat H., TURGUT A. E. , ŞAHİN E.

9th International Symposium on Distributed Autonomous Robotic Systems (DARS 9), Tsukuba City, Japan, 17 - 19 November 2008, pp.215-225

● **Modeling Phase Transition in Self-organized Mobile Robot Flocks**

TURGUT A. E. , Huepe C., Celikkanat H., Gokce F., ŞAHİN E.

6th Biannual International Conference on Ant Colony Optimization and Swarm Intelligence, Brussels, Belgium, 22 - 24 September 2008, vol.5217, pp.108-119

● **Self-organized flocking with a mobile robot swarm**

TURGUT A. E. , Çelikkanat H., Gökçe F., Şahin E.

7th International Joint Conference on Autonomous Agents and Multiagent Systems, AAMAS 2008, Estoril, Portugal, 12 - 16 May 2008, vol.1, pp.40-47

● **Dispersion of a swarm of robots based on realistic wireless intensity signals**

Ugur E., TURGUT A. E. , ŞAHİN E.

22nd International Symposium on Computer and Information Sciences, Ankara, Turkey, 7 - 09 November 2007, pp.419-424

● **Oğul-Robot Sistemleri için Sinyalleşme Sistemi Tasarımı**

TURGUT A. E. , ÇAKMAK M., ŞAHİN E., KOKU A. B.

Türk Otomatik Kontrol Ulusal Toplantısı (TOK06), Ankara, Turkey, 6 - 08 November 2006

● **Oğul Robot Sistemleri için Basit Bir Görüntüleme Sistemi Tasarımı**

ÇELİKKANAT H., TURGUT A. E. , ŞAHİN E., KOKU A. B.

Türk Otomatik Kontrol Ulusal Toplantısı (TOK06), Ankara, Turkey, 6 - 08 November 2006

Supported Projects

Şahin E., Koku A. B. , Turgut A. E. , Saranlı U., Kalkan S., Keysan O., Cinbiş R. G. , Akbaş E., Ankaralı M. M. , Saranlı A., et al, CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, ROBOTİK TEKNOLOJİLERİ ARAŞTIRMA, GELİŞTİRME ve EĞİTİM MERKEZİ (ROMER), 2019 - 2022

Şahin E., Turgut A. E. , Company, Sürü İHA Geliştirme Projesi, 2019 - 2021

Şahin E., Turgut A. E. , Project Supported by Other Private Institutions, Suru İHA Teknoloji Kazanım Yukumluluğu projesi, 2017 - 2019

TURGUT A. E. , Çamdere S. C. , Project Supported by Higher Education Institutions, KOBOT GEZGİN ROBOT SÜRÜSÜNÜN MODERNİZASYONU, 2017 - 2019

TURGUT A. E. , KAYGUSUZ B., Project Supported by Higher Education Institutions, Sürü Robotlar için Minyatür Piezo Elektrik Tabanlı Tutucu Geliştirilmesi, 2016 - 2016

Contractual Researches

Şahin E., Turgut A. E. , ATILIM Üniversitesi, Sürü İHA TKY Projesi, 2017 - 2019

Citations

Total Citations (WOS):107

h-index (WOS):6