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ÖZET BİLGİ

Doğum Tarihi : 1980

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Uzmanlık : Bilgisayar Mühendisi

EĞİTİM

- 2008 – 2012** Doktora, Mechanical and Systems Engineering (Robotik) , Newcastle University, İNGİLTERER
2006 – 2008 Yüksek Lisans, Bilgisayar Müh, Ankara University, TÜRKİYE
2000 – 2004 Lisans, Bilgisayar Müh, Baskent University, TÜRKİYE

PROFESYONEL ÇALIŞMA HAYATI

- 09.2018 – ? Doç Dr. - Ankara U.** TR
- 08.2014 – 09.2018 Dr. Öğretim Üyesi Ankara U.** TR
- 10.2012 – 07.2014 Dr. Ar. Gör - Ankara U.** TR
- 08.2009 – 05.2012 Araştırma Gör. - Newcastle U.** UK
- 01.2006 – 09.2008 Araştırma Gör. - Ankara U.** TR
- 12.2004 – 12.2005 Yazılım Müh- Havelsan** TR

Uluslararası Hakemli Dergiler

- Guzel, M., Ajabshir, V., Nattharith, P., Gezer, E., & Can, S. A Novel Framework for Multi-Agent Systems Using a Decentralized Strategy. *Robotica*, 1-17., 2019, doi:10.1017/S0263574718001261 (SCI).
- IN Askerzade, MS Guzel, Angular Dependence of the Critical Current Density in Two-Band Ginzburg-Landau Theory, *Journal of Superconductivity and Novel Magnetism*, 1-6 , 2019 (SCI).
- Karim, A.M, Guzel, M.S., Tolun, M., Kaya, H., A new framework using deep auto-encoder and energy spectral density for medical waveform data classification and processing, *Biocybernetics and Biomedical Engineering* 39(1), 148-59, 2019 (SCI).
- Karim, A.M, Guzel, M.S., Tolun, M., Kaya, H., A New Generalized Deep Learning Framework Combining Sparse Auto-encoder and Taguchi Method for Novel Data Classification and Processing, *Mathematical Problems in Engineering* Volume 2018, 1-13, (SCI).
- Guzel, M.S., Kara, M and Beyazkilic M. S., An adaptive framework for mobile robot navigation, *Adaptive Behaviour*, 25(1), 30-39, 2017. (SCI).
- Guzel, M. S., Nattharith, P. and Duran, A. S., A Goal Oriented Navigation System using Vision,UTEM, 9(2-3), 73-76, 2017.
- Guzel, M. S., Versatile Vehicle Tracking and Counting Application, *KaraElmas Science and Eng Journal*, 7(2), 622-626, 2017.
- Guzel, M. S., A Novel Framework for Text Recognition in Street View Images, *International Journal of Intelligent Systems and Applications in Engineering* 5(3), 140-144, 2017.
- Sevinc, O., Guzel, M. S and Askerbeyli, I., Predicting the future trends by mining the social web: A Survey, *International Journal of Research and Reviews in Applied Sciences* 31(2), 54-61, 2017.
- Vahid Babaei Ajabshir, Mehmet Serdar Guzel, Serhat Can, Erkan Bostanci, Optimization of potential field parameters using genetic algorithm, *Global Journal of Computer Sciences: Theory and Research* , 7(2), 34-43, 2017.
- Nattharith, P. and Guzel, M.S., Machine Vision and Fuzzy Logic based Navigation Control of a Goal-oriented Mobile Robot, *Adaptive Behavior*, 24(3), 168-180, 2016. (SCI).
- Meral E, Guzel, M.S., REAL-TIME GEOLOCATION TRACKING AND GEOFENCING USING GPRS+ GPS TECHNOLOGIES WITH SIM908 SHIELD OVER ARDUINO, *Commun.Fac.Sci.Univ.Ank.Series A2-A3*, 58(2),14-27,2016.
- Guzel, M.S.,Performance evaluation for feature extractors on street view images, *The Imaging Science Journal*, 2015. (SCI).
- Begüm Mutlu, Murat Hacıömeroğlu, Mehmet Serdar Guzel, Mehmet Dikmen, "Silhouette Extraction from Street View Images", *Int J Adv Robot Syst*, 2014, 11:114. doi: 10.5772/58740 (SCI).
- Güzel, M.S., " A Software Framework for Dynamic Modelling DC motors at robot Joints, *International Journal of Research in Engineering and Technology* 3 (4), 612 – 617, 2014.
- Güzel, M.S and Zakaria W., "A Hybrid Architecture for Vision-Based Obstacle Avoidance," *Advances in Mechanical Engineering*, vol. 2013, Article ID 697415, 11 pages , 2013, (SCI).

- Güzel, M.S., "Autonomous Vehicle Navigation Using Vision and Mapless Strategies: A Survey," Advances in Mechanical Engineering, vol. 2013, Article ID 697415, 11 pages, 2013, (SCI-expanded).
- Güzel, M.S. and Hınıslıođlu, Y., "A robotic software for intelligent applications" Artificial Life and Robotics, Springer, 2013, vol 1, pp 1-7.
- Güzel, M.S. and Bicker, R., "A behaviour-based architecture for Mapless Navigation Using Vision" International Journal of Advanced Robotic Systems , 2012, vol 9, pp 1-13. (SCI-expanded).
- Koyuncu, B., M. Güzel: Software development for the Kinematic analysis of a Lynx 6 Robot arm. International Journal of Engineering and Applied Science (ijoeas), 2008, vol 4, no 4, pp 230-236.
- Koyuncu, B., M. Güzel: Chess board application of 6 axes robot arm by using inverse kinematic equations . Computer Engineering , vol 1 , no 1 , 2007 , pp 59-67.

Kitap Bölümleri

- Güzel, M.S. and Bicker, R., "Vision based obstacle avoidance techniques", Recent Advances in Mobile Robotics,"Dr. Andon Topalov (Ed.), ISBN: 978-953-307-909-7, 2011, pp 83-108.
- Güzel, M.S and Kayakoku, H., A Collective Behaviour Framework for Multi-Agent Systems, Mechatronics and Robotics Engineering for Advanced and Intelligent Manufacturing, Part 1, pp 61-71, 2016.

Uluslararası Bildiri ve Sempozyumlar

- Güzel, M. S., A Decentralized Strategy for Autonomous Swarm Robots, International Conference on Theoretical and Applied Computer Science and Engineering, 2018 (Invited Speaker).
- Soylu, B, Güzel, M. S., A new deep learning based system for facial gesture analysis, The 6th International Conference on Control and Optimization with Industrial Applications, 2018.
- Asım A, Güzel, M. S, Askerbeyli, İman, A Vehicle Detection Approach Using Deep Learning Methodologies, II. International Conference on theoretical and applied computer science and engineering, 2018.
- Unal, F. Z, Güzel M. S. et. al, Comparison of the AlexNet based Face Recognition System with the State of the Art Methods, II. International Conference on theoretical and Applied Computer Science and Engineering, 2018.
- Detection of Light Sleep Periods Using an Accelerometer Based Alarm System, Turkyılmaz E, Bostancı E, Güzel, M. S International Conference on Advanced Technologies, Computer Engineering and Science (ICATCES'18),
- Yılmaz Ar, Metehan Unal, Sevgi Yigit Sert, Erkan Bostancı, Nadia Kanwal, Mehmet Serdar Güzel, Evolutionary Fuzzy Adaptive Motion Models for User Tracking in Augmented Reality Applications, 2018 (ISMSIT), 1-6, IEEE.
- Uygur Dincalp, Mehmet Serdar Güzel, Omer Sevine, Erkan Bostancı, Anomaly Based Distributed Denial of Service Attack Detection and Prevention with Machine Learning, (ISMSIT), 1-4, 2018, IEEE.
- Metehan Unal, Erkan Bostancı, Evren Sertalp, Mehmet Serdar Güzel, Geo-location Based Augmented Reality Application For Cultural Heritage Using Drones, (ISMSIT), 2018, 1-4, IEEE.
- Güzel, M.S., et al., An adaptive pattern formation approach for swarm robots, 4th International Conference on Electrical and Electronic Engineering (ICEEE), 194-198 , 2017.

- Dalgic, H. O., Bostanci, E and Guzel, M.S., Genetic Algorithm Based Floor Planning System, ICAIE, 924-928, 2017.
- Bostanci, E., Kanwal, N., Bostanci, B and Guzel, M.S., Finding Minimum Area Ellipse for Data Points using a Genetic Algorithm, 15th International Geometry Symposium Amasya University, Amasya, Turkey, 2017.
- Guzel M.S and Nattharith P.,A New Technique for Distance Estimation using SIFT for mobile robots, International Electrical Engineering Congress (iEECON2014), on March 19-21 2014 (EI).
- Nattharith P. and Guzel M. S., An indoor mobile robot development: a low cost platform for robotics research,International Electrical Engineering Congress (iEECON2014), on March 19-21 2014 (EI).
- Cihan E., Bostanci E. and Guzel M.S.,Cybercrimes against children in Turkey,Digital Forensic and Security (ISDFS), 2018 6th International Symposium , IEEE, March 22-25, 2018.
- Anar, A.C., Bostanci E. and Guzel M.S.,Live Target Detection with Deep Learning Neural Network and Unmanned Aerial Vehicle on Android Mobile Device,International Conference on Advanced Technologies, Computer Engineering and Science (ICATCES 18),May 11-13, 2018.
- Guzel, M.S. and Bicker, R., Optical flow based system design for mobile robots, Robotics Automation and Mechatronics (RAM), 2010 IEEE Conference, pp.545-550, 28-30 June 2010. (EI).
- Guzel M., Hınıslıođlu, Y:An Artificial low cost robot arm system playing tic-tac-toe, 9th Conference on Autonomous Robot Systems and Competitions, Robotica, Branco, Portugal,7-8 May 2009.
- Koyuncu,B.,Guzel, M: A visual Tool for Kinematics Analyses of Lynx-6 Robot Arms together with dynamic modeling of dc motors at robot joints ,International conference on Automation, Robotics and control systems, arcs-08 ,Florida,USA,July 2008, pp 145-150.
- Koyuncu,B., Guzel, M: Software Analysis of Lynx 6 Robot Arm , International conference on Automation, Robotics and Control systems , arcs-08 , Florida,USA, July 2008, proceedings pp 1-8.
- Guzel, M.S., et al., A mobile robot navigation system using a map-building based approach, 41st International Conference on Science, Engineering & Technology - ICSET 2017.
- Guzel M. S and Celik, I. B.,A Multi-Agent Robot Coordination Framework for Goal Based Navigation Problem, 2. IPCT Conference, Rome, Italy, 19-20 April, 2015.
- Guzel, M.S., Kayakoku, H and Ajabshir V. B, A Robotic Simulator for Mobile Robots,4th International Symposium on Innovative Technologies in Engineering and Science 3-5 November (ISITES2016), 1175-1181, 2016.

ÖNCELİKLİ ÇALIŞMA ALANLARI

- Gezgin Robotlar
- Bilgisayarlı Görü ve Görüntü İşleme
- Makine Öğrenmesi
- Endüstriyel Robotlar
- Sürü Zekası
- Medikal Görüntü İşleme

AKADEMİK TANISMANLIK

- NETCAD 07-2013 – 07.2015
- Mantis Software 05.2014 – 05.2017
- Miron 01.2016-12.2017
- MediVision 12-2018 -

Verilen Dersler

- COM364 Automate Theory
- COM469 Neural Networks
- BLM469 Yapay Sinir Ağları
- BLM492 Research Techniques II
- COM343 Object Oriented Programming
- COM 367 Algorithms
- COM 241 Programming Languages
- COM 417 Robotics
- BLM 417 Robotik
- BM413 İşletim Sistemleri (Turkish Military Academy)
- 826505 Sayısal Görüntü İşleme (YL)
- 826515 Yapay Zeka (Doktora)
- Araştırma Teknikleri (YL && Doktora)

Katkı Sağlanan Projeler

- **IWARD Project (FP6): (Araştırmacı)** **2009 – 2011**
(Newcastle U/ UK)
- **Real Time Location estimation for Mobile Devices (BAP): (Araştırmacı)** **2012 – 2013**
(Ankara U/TR)
- **Green Travelling (ITEA 2) : (Proje Kordinatörü)** **2014 – 2017**
(Mantis/TR)
- **Urban Explorer (TUBITAK): (Danışman)** **2015 –2017**
(NETCAD/TR)
- **Vision based Robot Navigation using Swarm Intelligence (Yürütücü)** **2014-2017**
(TÜBİTAK 3501 /TR)
- **LIVERVISION (KOSGEB and BAP) (Danışman ve Kordinatör)** **Devam ediyor**
- **ROKETSAN A.Ş GAZEBO based Simulation Software (Yürütücü)** **07.2018 – 01.2019**