

Asst. Prof. Muharrem MERCİMEK

Personal Information

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Education Information

Doctorate, The University Of Tennessee - Knoxville, College Of Engineering, Electrical Engineering, United States Of America 2006 - 2013

Post Graduate, Yıldız Teknik Üniversitesi, Elektrik Elektronik Fakültesi, Fen Bilimleri Enstitüsü, Turkey 2001 - 2003

Under Graduate, Yıldız Teknik Üniversitesi, Elektrik Elektronik Fakültesi, Elektronik Haberleşme Mühendisliği, Turkey 1997 - 2001

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Motion segmentation aided super resolution image reconstruction, The University of Tennessee, Knoxville, 2013

Post Graduate, Yapay sinir ağlarıyla 3-D bilgisayar görmesi, Yıldız Technical University, Faculty of Electrical & Electronics, Electronics And Communication Engineering, 2003

Research Areas

Information Systems, Communication and Control Engineering, Robotics and Mechatronics Systems, Route and Motion Planning, Signal Processing, Image and Video Processing, Computer Sciences, Computer Vision, Computer Vision, Artificial Intelligence, Computer Learning and Pattern Recognition, Pattern Recognition and Image Processing, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Yıldız Teknik Üniversitesi, Faculty of Electrical & Electronics, Control And Automation Engineering, 2014 - Continues

Professional Experience

Deputy Head of Department, Yıldız Technical University, Faculty of Electrical & Electronics, Control And Automation Engineering, 2018 - Continues

Deputy Head of Department, Yıldız Technical University, Faculty of Electrical & Electronics, Control And Automation Engineering, 2014 - 2016

Advising Theses

Mercimek M., Konumlandırma ve Haritalama Algoritmalarında Makine Öğrenmesi ve Parçacık Filtrelerinin Kullanılması, Doctorate, H.Örenbaş(Student), 2019

Mercimek M., Mini bilgisayar kullanılarak internet tabanlı ev otomasyonu uygulaması, Post Graduate, A.ÖZKAYA(Student), 2018

Mercimek M., GÖRÜNÜR IŞIK İLE HABERLEŞME VE SİSTEM TASARIMI, Post Graduate, A.DORUK(Student), 2016

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

- I. **Clustered Exact Daum-Huang Particle Flow Filter**
Örenbaş H., Mercimek M.
Mathematical Problems in Engineering, vol.2019, 2019 (Journal Indexed in SCI)
- II. **A new method for the registration of three-dimensional point-sets: The Gaussian Fields framework**
Boughorbel F., Mercimek M., Koschan A., Abidi M.
Image and Vision Computing, vol.28, pp.124-137, 2010 (Journal Indexed in SCI)
- III. **3D scanning transmission electron microscopy for catalysts: Imaging and data analysis**
Borisevich A., Lupini A., Koschan A., Mercimek M., Abidi M., Pennycook S.
Microscopy and Microanalysis, vol.14, pp.168-169, 2008 (Journal Indexed in SCI Expanded)
- IV. **Real object recognition using moment invariants**
Mercimek M., Gulez K., Mumcu T.
SADHANA-ACADEMY PROCEEDINGS IN ENGINEERING SCIENCES, vol.30, pp.765-775, 2005 (Journal Indexed in SCI)
- V. **3D real object recognition on the basis of moment invariants and neural networks**
MERCİMEK M., Gulez K.
COMPUTER AND INFORMATION SCIENCES - ISCIS 2004, PROCEEDINGS, vol.3280, pp.410-419, 2004 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Switching Control of an AC/DC Converter by Neural Networks**
Mumcu T. V. , Gulez K., Mercimek M.
INTERNATIONAL JOURNAL OF INFORMATION TECHNOLOGY, vol.11, pp.78-86, 2005 (Refereed Journals of Other Institutions)
- II. **Image Feature Extraction Using Dynamic Neural Network**
Bal A., MERCİMEK M.
ISTANBUL UNIVERSITY JOURNAL OF ELECTRICAL AND ELECTRONICS ENGINEERING, vol.2, pp.537-539, 2002 (Other Refereed National Journals)

Refereed Congress / Symposium Publications in Proceedings

- I. **Intelligent methods on increasing the quality of higher education**
Mercimek M., Yıldırım T.
International Conference on Innovation in Higher Education (IJIHE), Kyiv, Ukraine, 16 - 19 May 2003, pp.1-4
- II. **Design and implementation of real time face tracking humanoid robot**
Cilmi B., MERCİMEK M.
6th International Conference on Control Engineering and Information Technology, CEIT 2018, İstanbul, Turkey, 25 - 27 October 2018

- III. **An investigation of registration methods on the images degraded by atmospheric turbulence**
GEZER G., MERCİMEK M.
6th International Conference on Control Engineering and Information Technology, CEIT 2018, İstanbul, Turkey, 25 - 27 October 2018
- IV. **Internet Based Smart Home Automation Application Using Microcomputer**
Özkaya A., Mercimek M.
International Technological Sciences and Design Symposium, Giresun, Turkey, 27 - 29 June 2018, vol.1, no.1, pp.1-4
- V. **Spatial Codependency Adaptations for Super Resolution Image Reconstruction**
Mercimek M., Örenbaş H.
8th International Conference on Image Processing, Wavelet and Applications,, İstanbul, Turkey, 22 - 24 September 2016, pp.1-9
- VI. **Information Complexity Aided Statistical Background Modeling in Surveillance Applications**
Mercimek M., Bozdoğan H., Koschan A., Abidi M. A.
International Conference on Information Complexity and Statistical Modeling in High Dimensions with Applications (IC-SMHD-2016), Nevşehir, Turkey, 18 - 21 May 2016, pp.1-15
- VII. **Improving 3D Reconstruction from STEM Data**
Koschan A. F. , Mercimek M., Abidi M. A. , Borisevich A. Y. , Lupini A. R. , Pennycook S. J.
Microscopy Society of America, Florida, United States Of America, 5 - 09 August 2007, vol.13, pp.1664-1665
- VIII. **Comparison of Switching Elements in an AC/DC Converter by Neural Networks for Line Harmonic Currents**
Mumcu T. V. , Mercimek M., Gulez K.
International Conference on Intelligent Computing, Hefei, China, 23 - 26 August 2005, pp.540-549
- IX. **Bir Hidrolik Sistemin Yapay Sinir Ağları Temelli Konum Kontrolü**
Mercimek M., Akkaya A. V.
Akıllı Sistemlerde Yenilikler ve Uygulamaları , İstanbul, Turkey, 23 June 2004 - 25 June 2005, pp.175-178

Supported Projects

- Kaymakçı Ö. T. , Mercimek M., Öz M. A. N. , TUBITAK Project, Kumaş Hatalarının Endüstriyel Görüntü İşleme Teknikleri ile Tanılanması, 2018 - 2020
- Onat C., Mercimek M., Talu M. F. , TUBITAK Project, Investigation of Relationship Between Flame Form and Combustion Efficiency in Automatically Feeding Coal Boilers, 2014 - 2015

Scientific Refereeing

- TUBITAK Project, 1512 - Progressive Support Program for Entrepreneurship, INOVAKO TEKNOLOJİ LİMİTED ŞİRKETİ, Turkey, June 2019
- TUBITAK Project, 1512 - Progressive Support Program for Entrepreneurship, FOTONİKSENSE TEKNOLOJİ SANAYİ VE TİCARET LİMİTED ŞİRKETİ, Turkey, May 2019

Scientific Research / Working Group Memberships

- Iris (Imaging, Robotics, And Intelligent Systems) Laboratory, The University of Tennessee, Amerika Birleşik Devletleri, <https://www.imaging.utk.edu/>, 2005 - 2013

Citations

Total Citations (WOS):65

h-index (WOS):2