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Publons / Web Of Science ResearcherID: J-4670-2018
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Education Information

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Turkey 2010 - 2016
Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Biyomedikal Mühendisliği, Turkey 2007 - 2009
Undergraduate, Cukurova University, Mühendislik - Mimarlık Fakültesi, Elektrik - Elektronik Mühendisliği, Turkey 2003 - 2007

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Simulation of a Ring Fixator System With Patient-Specific Bone Modeling, Cukurova University, Fen Bilimleri Enstitüsü, Elektrik Elektronik Mühendisliği, 2016
Postgraduate, Tek Sınıf Destek Vektör Makineleri Kullanılarak Epileptik EEG İşaretlerinin Sınıflandırılması , Istanbul Technical University, Elektronik Ve Haberleşme Mühendisliği, Biyomedikal Mühendisliği, 2009

Research Areas

Computer Sciences, Computer Graphics, Computer Graphics, Artificial Intelligence, Computer Learning and Pattern Recognition, Pattern Recognition and Image Processing, Engineering and Technology

Academic Titles / Tasks

Research Assistant PhD, Cukurova University, Mühendislik Mimarlık Fakültesi, Elektrik Elektronik Mühendisliği, 2016 - Continues
Research Assistant, Cukurova University, Mühendislik - Mimarlık Fakültesi, Elektrik - Elektronik Mühendisliği, 2012 - 2016

Research Assistant, Osmaniye Korkut Ata University, Mühendislik - Mimarlık Fakültesi, Elektrik - Elektronik Mühendisliği, 2010 - 2011

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Overview of smart home concepts through energy management systems, numerical research, and future perspective**
Buyuk M., AVŞAR E., İNCİ M.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, 2022 (SCI-Expanded)

II. **EVALUATION OF AN ELECTRONIC IRRIGATION SYSTEM WITH INTERNET CONNECTION IN STRAWBERRY CULTIVATION**
AVŞAR E., Bulus K., SARIDAŞ M. A., KAPUR B.
ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL, vol.20, no.9, pp.1487-1497, 2021 (SCI-Expanded)

III. **Artificial intelligence techniques for the vibration, noise, and emission characteristics of a hydrogen-enriched diesel engine**
Yildirim S., TOSUN E., Calik A., ULUOCAK İ., AVŞAR E.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.41, no.18, pp.2194-2206, 2019 (SCI-Expanded)

IV. **An analytical method to create patient-specific deformed bone models using X-ray images and a healthy bone model**
ÜN M. K., AVŞAR E., AKÇALI İ. D.
COMPUTERS IN BIOLOGY AND MEDICINE, vol.104, pp.43-51, 2019 (SCI-Expanded)

V. **Artificial intelligence techniques for the vibration, noise, and emission characteristics of a hydrogen-enriched diesel engine**
YILDIRIM S., TOSUN E., ÇALIK A., ULUOCAK İ., AVŞAR E.
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VI. **An analytical method to create patient-specific deformed bone models using X-ray images and a healthy bone model**
ÜN M. K., AVŞAR E., AKÇALI İ. D.
COMPUTERS IN BIOLOGY AND MEDICINE, vol.104, pp.43-51, 2019 (SCI-Expanded)

VII. **Dimensionality reduction for predicting CO conversion in water gas shift reaction over Pt-based catalysts using support vector regression models**
AVŞAR E.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.36, pp.23326-23333, 2017 (SCI-Expanded)

Articles Published in Other Journals

I. **Performance Evaluation of Various Regression Models and Features for Prediction of Ozone Concentration**
Dümen S., AVŞAR E., ÇEVİK U.
Cukurova University Journal of the Faculty of Engineering, vol.35, no.3, pp.567-573, 2020 (Peer-Reviewed Journal)

II. **DETECTION AND CLASSIFICATION OF BRAIN TUMOURS FROM MRI IMAGES USING FASTER R-CNN**
AVŞAR E., SALCIN K.
TEHNICKI GLASNIK-TECHNICAL JOURNAL, vol.13, no.4, pp.337-342, 2019 (ESCI)

III. **Automatic 3D modeling and simulation of bone-fixator system in a novel graphical user interface**
AVŞAR E., Ün K.
Informatics in Medicine Unlocked, vol.2, pp.78-91, 2016 (Scopus)

IV. **Ortopedik Uygulamalarda Bilgisayarlı Denetim Sistemi**

AVŞAR E., AKÇALI İ. D., AYDIN A., ÜN M. K., MUTLU H., İBRİKÇİ T., ÖZKAN C., BİÇER Ö. S.
Çukurova Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, vol.30, no.2, pp.93-101, 2015 (Peer-Reviewed Journal)

V. **Tekil Olmayan Fiksatör Otomasyonu**
AYDIN A., Akcali I. D., AVŞAR E., ÜN M. K., Mutlu H., İBRİKÇİ T., BİÇER Ö. S., ÖZKAN C., Durmaz A.
ÇUKUROVA ÜNİVERSİTESİ MÜHENDİSLİK MİMARLIK FAKÜLTESİ DERGİSİ, vol.30, no.2, pp.81-92, 2015 (Peer-Reviewed Journal)

VI. **Tekil Olmayan Fiksatör Otomasyonu**
AYDIN A., AKÇALI İ. D., AVŞAR E., ÜN M. K., MUTLU H., İBRİKÇİ T., BİÇER Ö. S., ÖZKAN C., Durmaz A.
Çukurova Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, vol.30, no.2, pp.81-92, 2015 (Peer-Reviewed Journal)

Books & Book Chapters

I. **Yeni Bir Fiksatör Teknolojisi**
AKÇALI İ. D., AVŞAR E., MUTLU H., AYDIN A.
in: Kontrol, Otomasyon ve Robotikte Yeni Teknolojiler, MMO İstanbul Şubesi, Editor, Yapım Tanıtım Yayıncılık San. ve Tic. Ltd. Şti., İstanbul, pp.143-199, 2017

Refereed Congress / Symposium Publications in Proceedings

I. **Lambda Fixator: A Novel Robotic System in Orthopedics**
AKÇALI İ. D., AYDIN A., AVŞAR E., MUTLU H.
The 4th International Conference on Control, Robotics and Cybernetics, Tokyo, Japan, 27 - 30 September 2019

II. **Development of a Cloud-Based Automatic Irrigation System: a Case Study on Strawberry Cultivation**
AVŞAR E., Bulus K., SARIDAŞ M. A., KAPUR B.
7th International Conference on Modern Circuits and Systems Technologies (MOCAST), Thessaloniki, Greece, 7 - 09 May 2018

III. **Direct Kinematics for a Novel Robotic System Used as External Fixator**
AKÇALI İ. D., AVŞAR E., MUTLU H., AYDIN A.
1st World Robot Conference (WRC) / Symposium on Advanced Robotics and Automation (SARA), Beijing, China, 16 August 2018, pp.214-219

IV. **Remaining Useful Life Estimation from Fuel Cell Data Using Support Vector Regression Models**
AVŞAR E., YILDIRIM S., Çalık A.
2nd International Mediterranean Science and Engineering Congress (IMSEC 2017), Adana, Turkey, 25 - 27 October 2017, pp.1563

V. **A novelty detection approach to classification of breast tissue containing microcalcifications**
AVŞAR E., Bulus K.
2017 International Conference on Research in Adaptive and Convergent Systems, RACS 2017, Krakow, Poland, 20 - 23 September 2017, pp.100-103

VI. **Prediction of Carbon Monoxide Conversion of Water Gas Shift Reactions using Support Vector Machines**
AVŞAR E.
1st International Mediterranean Science and Engineering Congress, Adana, Turkey, 26 - 28 October 2016, pp.3568

VII. **Detection of Cancerous Pap-Smear Images Using One-Class Support Vector Machines and Minimum Redundancy - Maximum Relevance Feature Selection Method**
AVŞAR E.
International Conference on Natural Science and Engineering, Kilis, Turkey, 19 - 20 March 2016, pp.397-402

VIII. **Singularity analysis of a fixator by closest points approach Fiksatörün En Yakin Noktalar**

Yaklaşimiyla Tekillik Denetimi
AKÇALI İ. D., AVŞAR E., DURMAZ A., Sağdiç I., AYDIN A., ÜN M. K., Mutlu H., İBRİKÇİ T., ÖZKAN C., BİÇER Ö. S.
Medical Technologies National Conference, TIPTEKNO 2015, Bodrum, Turkey, 15 - 18 October 2015

IX. **Fiksatörün En Yakın Noktalar Yaklaşımıyla Tekillik Denetimi**
AKÇALI İ. D., AVŞAR E.
Tıp Teknolojileri Ulusal Kongresi (TIPTEKNO?15) Bildiriler Kitabı, Muğla, Turkey, 15 - 18 October 2015, pp.400-403

X. **Fiksatörün En Yakın Noktalar Yaklaşımıyla Tekillik Denetimi**
AKÇALI İ. D., AVŞAR E., AYDIN A., ÜN M. K., İBRİKÇİ T.
Tıp Teknolojileri Ulusal Kongresi, TIPTEKNO'15, Muğla, Turkey, 15 - 18 October 2015

XI. **Singularity Detection İn an External Fixator of Gough Stewart Platform Type**
AKÇALI İ. D., AVŞAR E., DURMAZ A., AYDIN A., ÜN M. K., İBRİKÇİ T., MUTLU H., ÖZKAN C., BİÇER Ö. S.
International Conference on Innovative Technologies, Dubrovnik, Croatia, 9 - 11 September 2015, pp.284-287

XII. **Singularity Detection in an External Fixator of Gough-Stewart Platform Type**
AKÇALI İ. D., AVŞAR E., Durmaz A., AYDIN A., ÜN M. K., İBRİKÇİ T., Mutlu H., ÖZKAN C., BİÇER Ö. S.
International Conference on Innovative Technologies, IN-TECH 2015, Dubrovnik, Croatia, 9 - 11 September 2015, pp.284-287

XIII. **Ortopedi'de Fiksatör Otomasyonu**
AKÇALI İ. D., AYDIN A., AVŞAR E.
1. Endüstriyel Otomasyon Kongre ve Sergisi, Adana, Turkey, 14 - 16 May 2015, pp.39-52

XIV. **Ortopedik Uygulamalarda Bilgisayarlı Denetim Sistemi**
AKÇALI İ. D., İBRİKÇİ T., AYDIN A., AVŞAR E.
1. Endüstriyel Otomasyon Kongre ve Sergisi, Adana, Turkey, 14 - 16 May 2015, pp.29-38

XV. **A Graphical User Interface for an External Fixation System**
AVŞAR E., ÜN M. K., AKÇALI İ. D.
IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI), Valencia, Spain, 1 - 04 June 2014, pp.480-483

XVI. **Tek-Sınıf Destek Vektör Makineleri Kullanılarak Epileptik EEG İşaretlerinin Sınıflandırılması.**
AVŞAR E., Kamaşak M. E., Çataltepe Z.
14. Biyomedikal Mühendisliği Ulusal Toplantısı, İzmir, Turkey, 20 - 24 May 2009, pp.1-4

Supported Projects

AVŞAR E., TUBITAK Project, Otonom Tarımsal Fide Filizlenme Alanı Tespit Robotu Tasarım ve İmalatı, 2017 - Continues
AVŞAR E., Salçın K., Project Supported by Higher Education Institutions, A Method for Brain Tumor Classification from MRI Images Using Deep Learning and Image Enhancement Techniques, 2019 - 2019
AVŞAR E., BULUŞ K., Project Supported by Higher Education Institutions, A Novelty Detection Approach to Classification of Breast Tissue Containing Microcalcifications, 2017 - 2017
AKÇALI İ. D., AVŞAR E., MUTLU H., AYDIN A., Project Supported by Higher Education Institutions, Lambda Fiksatörü, 2015 - 2017

Scientific Refereeing

Technical Journal, Other Indexed Journal, May 2017
International Journal of RF and Microwave Computer Aided Engineering, SCI Journal, January 2017
TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES, SCI Journal, September 2016
Turkish Journal of Electrical Engineering & Computer Sciences, SCI Journal, June 2016

Metrics

Publication: 30
Citation (WoS): 45
Citation (Scopus): 61
H-Index (WoS): 4
H-Index (Scopus): 5