Assoc. Prof. İsa Yıldırım

Personal Information

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International Researcher IDs
ORCID: 0000-0002-3286-7245
ScopusID: 55254325700
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Education Information

Doctorate, University of Illinois at Chicago, Elektrik Ve Bilgisayar Mühendisliği, United States Of America 2004 - 2009
Postgraduate, Istanbul Technical University, Bilişim Enstitüsü, Uydu Haberleşmesi Ve Uzaktan Algılama (Yl) (Tezli), Turkey 2002 - 2004
Undergraduate, Istanbul Technical University, Elektrik-Elektronik Fakültesi, Elektronik Ve Haberleşme Mühendisliği Bölümü, Turkey 1998 - 2002

Foreign Languages

English

Dissertations

Doctorate, Estimation of Retinal Vascular Oxygen Tension using PhosphorescenceLifetime Imaging, University Of Illinois At Chicago, Elektrik Ve Bilgisayar Mühendisliği, 2009
Postgraduate, Improvement of Classification Accuracy in Remote Sensing by MorphologicalFiltering, İstanbul Teknik Üniversitesi, Bilişim Enstitüsü, Uydu Haberleşmesi Ve Uzaktan Algılama (Yl) (Tezli), 2004

Research Areas

Technical Sciences, Biomedical Engineering, Biomedical Image Processing, Biomedical Image Processing, Electrical and Electronics Engineering

Academic Titles / Tasks

Associate Professor, Istanbul Technical University, Elektrik-Elektronik Fakültesi, Elektronik Ve Haberleşme Mühendisliği Bölümü, 2015 - Continues
Assistant Professor, Istanbul Technical University, Elektrik-Elektronik Fakültesi, Elektronik Ve Haberleşme Mühendisliği Bölümü, 2012 - 2015

Academic and Administrative Experience

İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Savunma Teknolojileri Anabilim Dalı, 2012 - Continues
İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Biyomedikal Mühendisliği Anabilim Dalı, 2012 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Resolution aware nonconvex quasinorm iterative digital breast tomosynthesis imaging**
DEMİREL ŞAHİN G., Ertas M., Yıldırım İ.
Biomedical Signal Processing and Control, vol.85, 2023 (SCI-Expanded)

II. **An unsupervised reconstruction method for low-dose CT using deep generative regularization prior**
Unal M. O., Ertas M., Yıldırım İ.
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.75, 2022 (SCI-Expanded)

III. **A miniaturized optical tomography platform for volumetric imaging of engineered living systems**
Polat A., Hassan S., Yıldırım İ., Oliver L. E., Mostafaei M., Kumar S., Maharjan S., Bourguet L., Cao X., Ying G., et al.
LAB ON A CHIP, vol.19, no.4, pp.550-561, 2019 (SCI-Expanded)

IV. **Digital Breast Tomosynthesis imaging using compressed sensing based reconstruction for 10 radiation doses real data**
Polat A., Matela N., DİNLER A., Zhang Y. S., Yıldırım İ.
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.48, pp.26-34, 2019 (SCI-Expanded)

V. **An iterative reconstruction algorithm for digital breast tomosynthesis imaging using real data at three radiation doses**
Polat A., Yıldırım İ.
JOURNAL OF X-RAY SCIENCE AND TECHNOLOGY, vol.26, no.3, pp.347-360, 2018 (SCI-Expanded)

VI. **An Approximate Spectral Clustering Ensemble for High Spatial Resolution Remote-Sensing Images**
Tasdemir K., MOAZZEN Y., Yıldırım İ.
IEEE JOURNAL OF SELECTED TOPICS IN APPLIED EARTH OBSERVATIONS AND REMOTE SENSING, vol.8, no.5, pp.1996-2004, 2015 (SCI-Expanded)

VII. **Approximate spectral clustering with utilized similarity information using geodesic based hybrid distance measures**
Tasdemir K., YALCIN B., Yıldırım İ.
PATTERN RECOGNITION, vol.48, no.4, pp.1465-1477, 2015 (SCI-Expanded)

VIII. **An iterative tomosynthesis reconstruction using total variation combined with non-local means filtering**
Ertas M., YILDIRIM İ., Kamasak M. E., AKAN A.
BIOMEDICAL ENGINEERING ONLINE, vol.13, 2014 (SCI-Expanded)

IX. **Automated Nanofiber Diameter Measurement in SEM Images Using a Robust Image Analysis Method**
Oznergiz E., Kiyak Y. E., Kamaşak M. E., YILDIRIM İ.
JOURNAL OF NANOMATERIALS, 2014 (SCI-Expanded)

X. **Direct Regularized Estimation of Retinal Vascular Oxygen Tension Based on an Experimental Model**
Yıldırım İ., ANSARI R., Yetik I. S., SHAHIDI M.
ANNALS OF BIOMEDICAL ENGINEERING, vol.41, no.11, pp.2285-2295, 2013 (SCI-Expanded)

XI. **Digital breast tomosynthesis image reconstruction using 2D and 3D total variation minimization**
Ertas M., YILDIRIM İ., Kamasak M. E., AKAN A.
BIOMEDICAL ENGINEERING ONLINE, vol.12, 2013 (SCI-Expanded)

XII. **A fast regularized least-squares method for retinal vascular oxygen tension estimation using a phosphorescence lifetime imaging model**
Gunay G., Yıldırım İ.
BIOMEDICAL ENGINEERING ONLINE, vol.12, 2013 (SCI-Expanded)

XIII. **An Object-Oriented Simulator for 3D Digital Breast Tomosynthesis Imaging System**
Seyyedi S., CENGIZ K., Kamasak M. E., YILDIRIM İ.
COMPUTATIONAL AND MATHEMATICAL METHODS IN MEDICINE, 2013 (SCI-Expanded)

XIV. **Regularized Estimation of Retinal Vascular Oxygen Tension From Phosphorescence Images**
Yildirim I., ANSARI R., WANEK J., Yetik I. S., SHAHIDI M.
IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING, vol.56, no.8, pp.1989-1995, 2009 (SCI-Expanded)

XV. **Improvement of classification accuracy in remote sensing using morphological filter**
Yildirim I., ERSOY O., YAZGAN B.
ATMOSPHERIC REMOTE SENSING: EARTH'S SURFACE, TROPOSPHERE, STRATOSPHERE AND MESOSPHERE - I, vol.36, no.5, pp.1003-1006, 2005 (SCI-Expanded)

Supported Projects

Yıldırım İ., Ünal M. O., Project Supported by Higher Education Institutions, Üç Boyutlu Meme Görüntülemede Yerel Olmayan Toplam Değişinti ile Düzenlileştirilmiş Yinelemeli Geriçatma Yönteminin Geliştirilmesi ve Gerçeklenmesi, 2020 - Continues

Yıldırım İ., Project Supported by Higher Education Institutions, Map of Oxygen Tension in Retinal Vessels with Phosphorescence Lifetime Imaging, 2012 - 2018

Metrics

Publication: 40
Citation (WoS): 114
Citation (Scopus): 137
H-Index (WoS): 5
H-Index (Scopus): 7

Non Academic Experience

University of Illinois at Chicago