

## **Asst. Prof. İREM ÜLKÜ**

### **Personal Information**

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### **International Researcher IDs**

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Publons / Web Of Science ResearcherID: AHD-8857-2022

ScopusID: 57219399185

Yoksis Researcher ID: 17575

### **Education Information**

Doctorate, Cankaya University, Faculty Of Engineering, Department Of Electronics And Communications Engineering, Turkey 2013 - 2017

Postgraduate, Middle East Technical University, Faculty Of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 2010 - 2012

### **Foreign Languages**

English, C1 Advanced

### **Research Areas**

Artificial Intelligence, Computer Learning and Pattern Recognition

### **Academic Titles / Tasks**

Assistant Professor, Ankara University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2021 - Continues

Expert, Cankaya University, Faculty Of Engineering, Department Of Electronics And Communications Engineering, 2010 - 2021

Expert, Cankaya University, Faculty Of Engineering, Department Of Industrial Engineering, 2009 - 2010

### **Academic and Administrative Experience**

Deputy Head of Department, Ankara University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2022 - Continues

### **Courses**

Ağ programlaması, Undergraduate, 2013 - 2014

Elektriksel Devre Analizi ve Enstrümantasyon + Lab., Undergraduate, 2013 - 2014

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Effect of unconventional current-phase relation of Josephson junction on escape rate in ac SQUID**  
Askerzade İ., Askerbeyli R. T., ÜLKÜ İ.  
PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.598, 2022 (SCI-Expanded)
- II. **A Survey on Deep Learning-based Architectures for Semantic Segmentation on 2D Images**  
ÜLKÜ İ., AKAGÜNDÜZ E.  
APPLIED ARTIFICIAL INTELLIGENCE, vol.36, no.1, 2022 (SCI-Expanded)
- III. **Deep Semantic Segmentation of Trees Using Multispectral Images**  
ÜLKÜ İ., AKAGÜNDÜZ E., Ghamisi P.  
IEEE JOURNAL OF SELECTED TOPICS IN APPLIED EARTH OBSERVATIONS AND REMOTE SENSING, vol.15, pp.7589-7604, 2022 (SCI-Expanded)
- IV. **LOSSY COMPRESSIVE SENSING BASED ON ONLINE DICTIONARY LEARNING**  
Ulku İ., Kizgut E.  
COMPUTING AND INFORMATICS, vol.38, no.1, pp.151-172, 2019 (SCI-Expanded)
- V. **LARGE-SCALE HYPERSPECTRAL IMAGE COMPRESSION VIA SPARSE REPRESENTATIONS BASED ON ONLINE LEARNING**  
Ulku İ., Kizgut E.  
INTERNATIONAL JOURNAL OF APPLIED MATHEMATICS AND COMPUTER SCIENCE, vol.28, no.1, pp.197-207, 2018 (SCI-Expanded)
- VI. **Sparse representations for online-learning-based hyperspectral image compression**  
Ulku İ., Töreyn B. U.  
APPLIED OPTICS, vol.54, no.29, pp.8625-8631, 2015 (SCI-Expanded)
- VII. **Sparse coding of hyperspectral imagery using online learning**  
Ulku İ., Töreyn B. U.  
SIGNAL IMAGE AND VIDEO PROCESSING, vol.9, no.4, pp.959-966, 2015 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Semantic Segmentation of Crop Areas in Remote Sensing Imagery using Spectral Indices and Multiple Channels**  
ÜLKÜ İ., AKAGÜNDÜZ E.  
15th International Conference on Machine Vision (ICMV), Rome, Italy, 18 - 20 November 2022, vol.12701
- II. **Comparison of Single Channel Indices for U-Net Based Segmentation of Vegetation in Satellite Images**  
Ulku İ., Barmoutis P., Stathaki T., AKAGÜNDÜZ E.  
12th International Conference on Machine Vision (ICMV), Amsterdam, Netherlands, 16 - 18 November 2019, vol.11433
- III. **Hyperspectral Image Compression Using an Online Learning Method**  
Ulku İ., Töreyn B. U.  
Conference on Satellite Data Compression, Communications, and Processing XI, Maryland, United States Of America, 23 - 24 April 2015, vol.9501
- IV. **LOSSY COMPRESSION OF HYPERSPECTRAL IMAGES USING ONLINE LEARNING BASED SPARSE CODING**  
Ulku İ., Töreyn B. U.  
International Workshop on Computational Intelligence for Multimedia Understanding (IWCIM), Paris, France, 1 - 02 November 2014

## Metrics

Publication: 11

Citation (WoS): 43

Citation (Scopus): 52

H-Index (WoS): 4

H-Index (Scopus): 4