

**Asst. Prof. HÜSEYİN GÖKHAN
AKÇAY**



Personal Information

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Antalya Kampüsü Dumlupınar Bulvarı 07058 Antalya/Türkiye

International Researcher IDs

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Publons / Web Of Science ResearcherID: E-5142-2018

Yoksis Researcher ID: 270179

Education Information

Doctorate, Ihsan Dogramaci Bilkent University, Faculty Of Engineering, Bilgisayar Mühendisliği, Turkey 2007 - 2016

Postgraduate, Ihsan Dogramaci Bilkent University, Faculty Of Engineering, Bilgisayar Mühendisliği, Turkey 2004 - 2007

Undergraduate, Ihsan Dogramaci Bilkent University, Faculty Of Engineering, Bilgisayar Mühendisliği, Turkey 2000 - 2004

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Automatic detection of compound structures by joint selection of region groups from multiple hierarchical segmentations, Ihsan Dogramaci Bilkent University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2016

Postgraduate, Hierarchical segmentation, object detection and classification in remotely sensed images, Ihsan Dogramaci Bilkent University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2007

Research Areas

Computer Sciences, algorithms, Computer Vision, Computer Vision, Artificial Intelligence, Computer Learning and Pattern Recognition, Computer Learning, Pattern Recognition and Image Processing, Neural Networks, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Akdeniz University, Faculty of Engineering, Bilgisayar Mühendisliği, 2017 - Continues

Courses

Doctorate

Deep Learning, Doctorate, 2021 - 2022

Advanced Neural Networks, Doctorate, 2020 - 2021, 2019 - 2020

Postgraduate

Biyolojik İşaretlerin İşlenmesi, Postgraduate, 2020 - 2021, 2019 - 2020

Machine Learning, Postgraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

Big Data Analysis, Postgraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

Analysis of Algorithms, Postgraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

Image Processing, Postgraduate, 2018 - 2019, 2017 - 2018

Sosyal Ağ Analizi, Postgraduate, 2018 - 2019

Undergraduate

Scientific Programming, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

Senior Design Project II, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

Introduction to Machine Learning, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

Algorithms, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

Senior Design Project I, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

Introduction to Image Processing, Undergraduate, 2018 - 2019, 2017 - 2018

Computer Programming, Undergraduate, 2018 - 2019

Programming Languages, Undergraduate, 2017 - 2018

Computer Basics and Algorithms, Undergraduate, 2018 - 2019

Neural Networks, Undergraduate, 2018 - 2019

Jury Memberships

Post Graduate, Tez Savunma Jürisi, Akdeniz Üniversitesi, January, 2020

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Predicting graft survival in paediatric kidney transplant recipients using machine learning**
Aksoy G. K., AKÇAY H. G., Arı Ç., Adar M., KOYUN M., ÇOMAK E., AKMAN S.
Pediatric Nephrology, vol.40, no.1, pp.203-211, 2025 (SCI-Expanded)
- II. **Analysis of Bayesian Network Learning Techniques for a Hybrid Multi-objective Bayesian Estimation of Distribution Algorithm: a case study on MNK Landscape**
Martins M. S. R., Yafrani M. E., Delgado M., Luders R., Santana R., Siqueira H. V., Akcay H. G., Ahiod B.
JOURNAL OF HEURISTICS, vol.27, no.4, pp.549-573, 2021 (SCI-Expanded)
- III. **Automated Bird Counting with Deep Learning for Regional Bird Distribution Mapping**
AKÇAY H. G., KABASAKAL B., AKSU D., DEMİR N., ÖZ M., ERDOĞAN A.
ANIMALS, vol.10, no.7, 2020 (SCI-Expanded)
- IV. **Automatic Detection of Compound Structures by Joint Selection of Region Groups From a Hierarchical Segmentation**
Akcay H. G., Aksoy S.
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol.54, no.6, pp.3485-3501, 2016 (SCI-Expanded)
- V. **Automatic Mapping of Linear Woody Vegetation Features in Agricultural Landscapes Using Very High Resolution Imagery**
Aksoy S., Akcay H. G., WASSENAAR T.
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol.48, no.1, pp.511-522, 2010 (SCI-Expanded)
- VI. **Automatic detection of geospatial objects using multiple hierarchical segmentations**
Akcay H. G., Aksoy S.
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol.46, no.7, pp.2097-2111, 2008 (SCI-Expanded)

Books

I. Image Classification and Object Detection Using Spatial Contextual Constraints

AKÇAY H. G., AKSOY S., CİNBİŞ R. G.

in: Signal and Image Processing for Remote Sensing, Chen C.H. , Editor, Crc Academic Press, Boca Raton, Florida, pp.441-461, 2012

Papers Published in Refereed Scientific Meetings

I. Fusion Planet: Past, Today and Future of Computer Scientific Solutions in Digital Pathology

Alkan T. Y., Akçay H. G., Toru H. S.

International Congress of Future Medical Pioneers , 8 - 09 May 2021, pp.2-3

II. A Novel Hepatocellular Carcinoma Xenograft Model in Zebrafish

AVCI M. E., AKÇAY H. G., KARABULUT A., ADAMS M. M., ÖZTÜRK M., KONU KARAKAYALI Ö.

2. Uluslararası Moleküler Biyoloji Derneği Kongresi, 22 - 23 November 2013

III. DETECTION OF COMPOUND STRUCTURES USING MULTIPLE HIERARCHICAL SEGMENTATIONS

AKÇAY H. G., AKSOY S.

2012 IEEE INTERNATIONAL GEOSCIENCE AND REMOTE SENSING SYMPOSIUM (IGARSS), Munich, Germany, 22 - 27 July 2012, pp.6833-6836

IV. DETECTION OF COMPOUND STRUCTURES USING HIERARCHICAL CLUSTERING OF STATISTICAL AND STRUCTURAL FEATURES

AKÇAY H. G., AKSOY S.

2011 IEEE INTERNATIONAL GEOSCIENCE AND REMOTE SENSING SYMPOSIUM (IGARSS), Vancouver, Canada, 24 - 29 July 2011, pp.2385-2388

V. BUILDING DETECTION USING DIRECTIONAL SPATIAL CONSTRAINTS

AKÇAY H. G., AKSOY S.

2010 IEEE INTERNATIONAL GEOSCIENCE AND REMOTE SENSING SYMPOSIUM, Honolulu, South Korea, 25 - 30 June 2010, pp.1932-1935

VI. Automatic Mapping of Linearwoody Vegetation Features in Agricultural Landscapes

AKSOY S., AKÇAY H. G., CİNBİŞ R. G., WASSenaar T.

IGARSS 2008 - 2008 IEEE International Geoscience and Remote Sensing Symposium, Boston, MA, USA, United States Of America, 7 - 11 July 2008

VII. Multi-resolution segmentation and shape analysis for remote sensing image classification

AKSOY S., AKÇAY H. G.

2nd International Conference on Recent Advances in Space Technologies, Turkey, 09 June 2005

Supported Projects

TORU H. S., ÖZBUDAK İ. H., ÇELİK M. Y., ALKAN T. Y., AKÇAY H. G., SALEHİ MOHARER M., Project Supported by Higher Education Institutions, Küçük hücreli dışı akciğer kanserlerinde alt tiplendirme için yapay zeka uygulamaları, 2022 - Continues

Uluşar Ü. D., Çolak Ö. H., Akçay H. G., Bilge A., Ak M., TUBITAK Project, Turizm Sektörü İçin Yapay Zeka Destekli Sürdürülebilir Ulaşım Ekosistemi, 2024 - 2026

AKÇAY H. G., TUBITAK Project, Mining of Very High Resolution Satellite Images Using Hierarchical Graph Models, 2010 - 2012

AKÇAY H. G., TUBITAK Project, Probabilistic and Structural Approaches to Image Understanding, Classification and Retrieval, and Applications to Remote Sensing and Medical Image Analysis, 2005 - 2010

AKÇAY H. G., EU Supported Other Project, Automatic Mapping of Linear Woody Vegetation Features in Agricultural Landscapes, 2008 - 2008

AKÇAY H. G., TUBITAK Project, Hierarchical Classification, Mining and Semantic Retrieval in Remote Sensing Image Archives, 2005 - 2007

Metrics

Publication: 14

Citation (WoS): 247

Citation (Scopus): 405

H-Index (WoS): 4

H-Index (Scopus): 7

Congress and Symposium Activities

International Congress of Future Medical Pioneers, Invited Speaker, Alabama, United States Of America, 2021

Scholarships

2214 - TÜBİTAK Yurt Dışı Araştırma Bursu, TUBITAK, 2010 - Continues

Awards

Kaya Aksoy G., Akçay H. G., Akman S., Adar M., Koyun M., Çomak E., SÖZLÜ SUNUMLARDA BİRİNCİLİK, Çocuk Nefroloji Derneği, October 2023

AKÇAY H. G., IEEE Sinyal İşleme ve İletişim Uygulamaları Kurultayı Uzaktan Algılama İçin Sinyal Ve Görüntü İşleme Çalıştayı En İyi Öğrenci Bildirisi Ödülü, TÜBİTAK UZAY, April 2014