

Asst. Prof. Tolga BAKIRMAN

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Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Uzaktan Algılama Ve Cbs, Turkey 2013 - 2019

Postgraduate, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, Uzaktan Algılama Ve Cbs, Turkey 2011 - 2013

Undergraduate, Yıldız Teknik Üniversitesi, Faculty of Construction, Harita Mühendisliği Bölümü, Turkey 2006 - 2010

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Investigation of Seagrass Habitat Determination Possibilities using Remote Sensing and Multi Criteria Decision Analysis, Yildiz Technical University, Faculty Of Construction, Geomatic Engineering, 2019

Postgraduate, Web based GIS, street view and virtual reality, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Uzaktan Algılama Ve Cbs, 2013

Research Areas

Geotechnical Engineering, Remote sensing, Image Processing, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Yildiz Technical University, Faculty Of Construction, Geomatic Engineering, 2021 - Continues

Medical Doctor, Istanbul Technical University, 2019 - 2021

Research Assistant, Yildiz Technical University, Faculty Of Construction, Geomatic Engineering, 2010 - 2019

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

- I. **Deep neural network approaches for detecting gastric polyps in endoscopic images**
DURAK S., BAYRAM B., BAKIRMAN T., ERKUT M., Doğan M., GÜRTÜRK M., AKPINAR B.
Medical and Biological Engineering and Computing, vol.59, pp.1563-1574, 2021 (Journal Indexed in SCI)
- II. **An ensemble deep learning based shoreline segmentation approach (WaterNet) from Landsat 8 OLI**

images

Erdem F., BAYRAM B., Bakirman T., BAYRAK O. C. , AKPINAR B.

ADVANCES IN SPACE RESEARCH, vol.67, no.3, pp.964-974, 2021 (Journal Indexed in SCI)

- III. **Implementation of ultra-light UAV systems for cultural heritage documentation**
Bakirman T., Bayram B., Akpınar B., Karabulut M. F. , Bayrak O. C. , Yigitoglu A., Şeker D. Z.
JOURNAL OF CULTURAL HERITAGE, vol.44, pp.174-184, 2020 (Journal Indexed in SCI)
- IV. **A novel GIS-MCDA-based spatial habitat suitability model for Posidonia oceanica in the Mediterranean**
Bakirman T., GÜMÜŞAY M. Ü.
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.192, no.4, 2020 (Journal Indexed in SCI)
- V. **A review of seagrass detection, mapping and monitoring applications using acoustic systems**
Gümüşay M. Ü. , Bakirman T., Tüney Kızılkaya İ., Aykut N. O.
European Journal of Remote Sensing, vol.52, pp.1-29, 2019 (Journal Indexed in SCI)
- VI. **Open Source Library-based 3D Face Point Cloud Generation**
Bayram B., Ozkan T., Reis H. C. , Bakirman T., Cetin I., Şeker D. Z.
CHIANG MAI JOURNAL OF SCIENCE, vol.45, pp.1875-1887, 2018 (Journal Indexed in SCI)
- VII. **Comparison of low cost 3D structured light scanners for face modeling**
Bakirman T., Gümüşay M. Ü. , Reis H. C. , Selbesoğlu M. O. , Yosmaoglu S., Yaras M. C. , Şeker D. Z. , Bayram B.
Applied Optics, vol.56, pp.985-992, 2017 (Journal Indexed in SCI)
- VIII. **An assessment of site suitability for marina construction in Istanbul, Turkey, using GIS and AHP multicriteria decision analysis**
Gümüşay M. Ü. , Koseoglu G., Bakirman T.
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.188, 2016 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **INTEGRATION OF CUSTOM STREET VIEW AND LOW COST MOTION SENSOR**
Bakirman T., GÜMÜŞAY M. Ü.
INTERNATIONAL JOURNAL OF ENGINEERING AND GEOSCIENCES, vol.5, no.2, pp.66-72, 2020 (Journal Indexed in ESCI)
- II. **Assessment of Machine Learning Methods for Seagrass Classification in the Mediterranean**
Bakirman T., Gumusay M. U.
BALTIC JOURNAL OF MODERN COMPUTING, vol.8, no.2, pp.315-326, 2020 (Journal Indexed in ESCI)
- III. **Yıldız Teknik Üniversitesi (YTÜ) Davutpaşa Kampüsü ÖSYM Salon Bilgi Sistemi**
BAKIRMAN T., GÜMÜŞAY M. Ü.
hkm Jeodezi Jeoinformasyon Arazi Yönetimi, no.2011, pp.146-149, 2011 (Other Refereed National Journals)

Refereed Congress / Symposium Publications in Proceedings

- I. **AÇIK MADEN SAHA SINIRLARININ PİKSEL TABANLI VE NESNE TABANLI SINIFLANDIRMA TEKNİKLERİ İLE ÇIKARIMI**
İNCEKARA A. H. , DELEN A., BAKIRMAN T., BAYRAM B., ŞEKER D. Z.
VII. Uzaktan Algılama-CBS Sempozyumu (UZAL-CBS 2018), 18-21 Eylül 2018, Eskişehir, Eskişehir, Turkey, 18 - 21 September 2018
- II. **LONG-TERM MONITORING OF WETLANDS VIA REMOTE SENSING AND GIS: A CASE STUDY FROM TURKEY**
MUSAOĞLU N., Tanık A., GÜMÜŞAY M. Ü. , Dervişoğlu A., BİLGİLİOĞLU B., YAĞMUR N., BAKIRMAN T., BARAN D., GÖKDAĞ F.
2nd International Conference on Climate Change 2018, Colombo, Sri Lanka, 15 - 16 February 2018, vol.2

- III. **Benthic Habitat Mapping with Multi Beam Echo Sounder System**
Gümüřay M. Ü. , Bakırman T., Tüney Kızılkaya İ., Aykut N. O.
INTERNATIONAL ECOLOGY 2018 SYMPOSIUM, Kastamonu, Turkey, 19 - 23 June 2018, pp.434
- IV. **Data reduction for indoor modelling of historical buildingby using terrestrial laser scanning technique**
BAYRAM B., ŐEKER D. Z. , BAKIRMAN T., SELBESOĐLU M. O. , ÇATAL REİS H., ESKİÇIRAK D., DURAN Z., DOĐRU A. Ö.
Sixth International Conferenceon Environmental Management, Engineering, Planning Economics, Selanik, 25 - 30 June 2017, pp.437-438
- V. **Monitoring the Effect of an Impoundment Built for Rehabilitation of Akgol Wetland- Turkey**
Derviřođlu A., Musaođlu N., Tanık A., Őenol A., Gümüřay M. Ü. , Bakırman T.
2nd International Conference on Civil and Environmental Engineering, Nevřehir, Turkey, 08 May 2017, pp.601-610
- VI. **DEFORMATION MEASUREMENT USING TERRESTRIAL LASER SCANNER FOR CULTURAL HERITAGE**
SELBESOĐLU M. O. , BAKIRMAN T., GOKBAYRAK O.
3rd International GeoAdvances Workshop / ISPRS Workshop on Multi-dimensional and Multi-Scale Spatial Data Modeling, İstanbul, Turkey, 16 - 17 October 2016, pp.89-93
- VII. **DESIGNING AND MODELLING COAST MANAGEMENT GIS FOR BOSPHORUS**
Gumusay M. Ü. , Ozdemir O., Bakirman T.
23rd Congress of the International-Society-for-Photogrammetry-and-Remote-Sensing (ISPRS), Prague, Czech Republic, 12 - 19 July 2016, vol.41, pp.215-220
- VIII. **MAPPING OF THE SEAGRASS COVER ALONG THE MEDITERRANEAN COAST OF TURKEY USING LANDSAT 8 OLI IMAGES**
Bakirman T., Gumusay M. U. , Tuney I.
23rd Congress of the International-Society-for-Photogrammetry-and-Remote-Sensing (ISPRS), Prague, Czech Republic, 12 - 19 July 2016, vol.41, pp.1103-1105
- IX. **Farklı Yöntemlerle Sınıflandırılmış Uydu Görüntülerinin Benzerlik Karşılaştırması**
BAKIRMAN T.
5. Uzaktan Algılama-CBS Sempozyumu, İstanbul, Turkey, 14 October 2014
- X. **Sentetik Açıklık Radar ve Multispektral Uydu Verilerinin Kaynaştırılması ve Sınıflandırılması**
BAKIRMAN T., BİLGİN G., BALIK ŐANLI F., USLU E., ÜSTÜNER M.
IEEE 22. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Trabzon, Turkey, 23 - 25 May 2014
- XI. **Fusion and Classification of Synthetic Aparture Radar and Multispectral Sattellite Data**
BAKIRMAN T., BİLGİN G., Sanli F. B. , USLU E., ÜSTÜNER M.
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.754-757
- XII. **Edremit Körfezi Kıyı Bilgi Sistemi**
Akdeniz Y., BAKIRMAN T., GÜMÜŐAY M. Ü.
CBS Kongresi 2013, Ankara, Turkey, 11 November 2013, pp.1-7
- XIII. **VISUAL TOUR BASED ON PANAROMIC IMAGES FOR INDOOR PLACES IN CAMPUS**
Bakirman T.
22nd Congress of the International-Society-for-Photogrammetry-and-Remote-Sensing, Melbourne, Australia, 25 August - 01 September 2012, pp.97-99

Supported Projects

Bakırman T., Sertel E., Project Supported by Higher Education Institutions, Automatic Building Extraction with Deep Learning Techniques, 2020 - 2021

Gümüřay M. Ü. , Musaođlu N., Tanık A. G. , Őenol A., Gümüřay A., TUBITAK Project, Akgöl Sulak Alanının Zamansal Analizi AHP ile Yönetim Stratejisinin Geliştirilmesi, 2017 - 2019

GÜMÜŐAY M. Ü. , TÜNEY İ., BAKIRMAN T., AYKUT N. O. , Project Supported by Higher Education Institutions, ÇOK BİMLİ İSKANDİL SİSTEMİ İLE DENİZALTI HABİTAT HARİTALAMA, 2015 - 2019

Scientific Refereeing

Journal of penal law and criminology, Journal Indexed in ESCI, December 2020

SIGNAL IMAGE AND VIDEO PROCESSING, SCI Journal, July 2020

TURKISH JOURNAL OF AGRICULTURE AND FORESTRY, SCI Journal, July 2020

ESTUARINE COASTAL AND SHELF SCIENCE, SCI Journal, February 2020

International Journal of Engineering and geosciences, Journal Indexed in ESCI, July 2019

IEEE JOURNAL OF SELECTED TOPICS IN APPLIED EARTH OBSERVATIONS AND REMOTE SENSING, SCI Journal, June 2019

MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, SCI Journal, May 2019

Applied Optics, SCI Journal, August 2017

JOURNAL OF THE EUROPEAN OPTICAL SOCIETY-RAPID PUBLICATIONS, SCI Journal, June 2017

Sensor Review, SCI Journal, April 2017

Ocean and Coastal Management, SCI Journal, March 2017

ISPRS Journal of Photogrammetry and Remote Sensing, SCI Journal, February 2017

Tasks In Event Organizations

Maktav D., Kılıç Gül F., Bayram B., Gümüşay M. Ü. , Yastıklı N., Balık Şanlı F., Uzar Dinlemek A. M. , Akpınar B., Acar U., Öcalan T., et al., 5. UZAKTAN ALGILAMA-CBS SEMPOZYUMU (UZAL-CBS 2014), Scientific Congress, İstanbul, Turkey, Ekim 2014

Bakırman T., 8th 3D GeoInfo, Scientific Congress, İstanbul, Turkey, Kasım 2013

Bakırman T., Kılıç Gül F., TMMOB 4. Coğrafi Bilgi Sistemleri Kongresi, Scientific Congress, Ankara, Turkey, Kasım 2013

Edit Congress and Symposium Activities

Low Cost 3D, Attendee, Hamburg, Germany, 2017

Hydro 2017, Attendee, Rotterdam, Netherlands, 2017

Citations

Total Citations (WOS):63

h-index (WOS):4

Scholarships

Seagrass Coverage Mapping using MBES and Satellite Image, TUBITAK, 2017 - 2018

MSc. Research, YOK, 2012 - 2012