

Prof. MAHMUT ONUR KARSLIOĞLU

Personal Information

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Education Information

Doctorate, Technische Universitaet München, Jeodezi Ve Jeoinformasyon, Germany 1995 - 2000

Postgraduate, Rheinische Friedrich-Wilhelms-Universitaet Bonn, Jeodezi Ve Jeoinformasyon, Germany 1985 - 1989

Undergraduate, Karadeniz Technical University, Mühendislik Fakültesi, Harita Mühendisliği Bölümü, Turkey 1977 - 1981

Foreign Languages

German, C1 Advanced

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2011 - Continues
Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2006 - 2011

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2001 - 2006

Advising Theses

KARSLIOĞLU M. O., ESTIMATION OF IONOSPHERIC THREAT MODEL PARAMETERS FOR GBAS USING GNSS DATA FOR MARMARA REGION, Postgraduate, A.YEGANEHSAHAB(Student), 2016

KARSLIOĞLU M. O., Analysis of GNSS time series obtained from Turkish national permanent GNSS stations network-active system using Hilbert-Huang transform /, Postgraduate, S.ÖZDEMİR(Student), 2014

KARSLIOĞLU M. O., Development of a Matlab-based toolbox for tide gauge records using Hilbert-Huang transform, Postgraduate, A.JAMALI(Student), 2013

KARSLIOĞLU M. O., A multi-criteria decision analysis approach to GIS-based route selection for overhead power transmission lines, Postgraduate, Y.DEDEMEN(Student), 2013

KARSLIOĞLU M. O., Non-parametric and semi-parametric regional modeling of the ionospheric vertical total electron content using ground-based GPS observations, Doctorate, M.DURMAZ(Student), 2013

KARSLIOĞLU M. O., Local modeling of the ionospheric vertical total electron content (VTEC) using particle filter, Postgraduate, A.AGHAKARİMİ(Student), 2012

KARSLIOĞLU M. O., GPS-based real-time orbit determination of artificial satellites using kalman, particle, unscented kalman and h-infinity filters, Postgraduate, E.ERDOĞAN(Student), 2011

KARSLIOĞLU M. O., Determination of sea level trends and vertical land motions from satellite altimetry and tide gauge observations at The Mediterranean coast of Turkey, Postgraduate, S.KARABİL(Student), 2011

KARSLIOĞLU M. O., Approaches for automatic urban building extraction and updating from high resolution satellite imagery, Doctorate, D.KOÇ(Student), 2009

KARSLIOĞLU M. O., Development of a Matlab based software package for ionosphere modeling, Doctorate, M.NOHUTCU(Student), 2009

KARSLIOĞLU M. O., Wavelet-based outlier detection and denoising of airborne laser scanning data, Postgraduate, T.Akyay(Student), 2008

DEMİREL N., KARSLIOĞLU M. O., Development of a GIS-based monitoring and management system for underground mining safety, Postgraduate, S.ŞALAP(Student), 2008

KARSLIOĞLU M. O., Direct georeferencing and orthorectification of airborne digital images, Postgraduate, A.COŞKUN(Student), 2008

KARSLIOĞLU M. O., Wavelet-based outlier detection and denoising of airborne laser scanner data, Postgraduate, T.AKYAY(Student), 2008

KARSLIOĞLU M. O., One-dimensional real-time signal denoising using wavelet-based Kalman filtering, Postgraduate, M.DURMAZ(Student), 2007

KARSLIOĞLU M. O., An automated building extraction model using fuzzy K-NN classifier from monocular aerial images, Postgraduate, Ç.ŞENARAS(Student), 2007

KARSLIOĞLU M. O., Different orbit determination algorithms for BİLSAT-1, Postgraduate, S.Ural(Student), 2006

KARSLIOĞLU M. O., A Java toolbox for wavelet based image denoising, Postgraduate, G.TUNCER(Student), 2006

KARSLIOĞLU M. O., Design and implementation of a search tool for roads on pocket PCS for mobile gis, Postgraduate, A.DİNÇER(Student), 2006

KARSLIOĞLU M. O., Sensitivity and error analysis of a differential rectification method for CCD frame cameras and pushbroom scanners, Postgraduate, Ö.HALİS(Student), 2006

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A new data-adaptive network design methodology based on the k-means clustering and modified ISODATA algorithm for regional gravity field modeling via spherical radial basis functions**
ULUĞ R., KARSLIOĞLU M. O.
Journal of Geodesy, vol.96, no.11, 2022 (SCI-Expanded)
- II. **SRBF_Soft: a Python-based open-source software for regional gravity field modeling using spherical radial basis functions based on the data-adaptive network design methodology**
ULUĞ R., KARSLIOĞLU M. O.
EARTH SCIENCE INFORMATICS, vol.15, no.2, pp.1341-1353, 2022 (SCI-Expanded)
- III. **Soft clustering of GPS velocities from a homogeneous permanent network in Turkey**
Ozdemir S., KARSLIOĞLU M. O.
JOURNAL OF GEODESY, vol.93, no.8, pp.1171-1195, 2019 (SCI-Expanded)
- IV. **GPS-Based Real-Time Orbit Determination of Low Earth Orbit Satellites Using Robust Unscented Kalman Filter**
KARSLIOĞLU M. O., Erdogan E., Pamuk O.
JOURNAL OF AEROSPACE ENGINEERING, vol.30, no.6, 2017 (SCI-Expanded)
- V. **Regional vertical total electron content (VTEC) modeling together with satellite and receiver differential code biases (DCBs) using semi-parametric multivariate adaptive regression B-splines (SP-BMARS)**
Durmaz M., KARSLIOĞLU M. O.
JOURNAL OF GEODESY, vol.89, no.4, pp.347-360, 2015 (SCI-Expanded)
- VI. **Non-parametric regional VTEC modeling with Multivariate Adaptive Regression B-Splines**
Durmaz M., KARSLIOĞLU M. O.
ADVANCES IN SPACE RESEARCH, vol.48, no.9, pp.1523-1530, 2011 (SCI-Expanded)
- VII. **Regional VTEC modeling with multivariate adaptive regression splines**
Durmaz M., KARSLIOĞLU M. O., Nohutcu M.
ADVANCES IN SPACE RESEARCH, vol.46, no.2, pp.180-189, 2010 (SCI-Expanded)
- VIII. **B-spline modeling of VTEC over Turkey using GPS observations**

Nohutcu M., KARSLIOĞLU M. O., Schmidt M.

JOURNAL OF ATMOSPHERIC AND SOLAR-TERRESTRIAL PHYSICS, vol.72, pp.617-624, 2010 (SCI-Expanded)

- IX. **Development of a GIS-based monitoring and management system for underground coal mining safety**
Şalap S., KARSLIOĞLU M. O., DEMİREL N.
INTERNATIONAL JOURNAL OF COAL GEOLOGY, vol.80, no.2, pp.105-112, 2009 (SCI-Expanded)
- X. **Airborne laser scanning data for snow covered biomass estimation**
Vazirabad Y. F., KARSLIOĞLU M. O.
JOURNAL OF APPLIED REMOTE SENSING, vol.3, 2009 (SCI-Expanded)
- XI. **An interactive program for GPS-based dynamic orbit determination of small satellites**
Karslioglu M.
COMPUTERS & GEOSCIENCES, vol.31, no.3, pp.309-317, 2005 (SCI-Expanded)
- XII. **A new differential geometric method to rectify digital images of the earth's surface using isothermal coordinates**
Karslioglu M., Friedrich E.
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol.43, no.3, pp.666-672, 2005 (SCI-Expanded)
- XIII. **A remote sensing computer-assisted learning tool developed using the unified modeling language**
Friedrich J., Karslioglu M.
ISPRS JOURNAL OF PHOTOGRAMMETRY AND REMOTE SENSING, vol.58, pp.265-274, 2004 (SCI-Expanded)
- XIV. **Thermodynamical parasitic forces in high precision accelerometers on board of a drag-free satellite**
Karslioglu M.
SENSORS AND ACTUATORS A-PHYSICAL, vol.111, pp.229-235, 2004 (SCI-Expanded)
- XV. **Updating Fortran programs and other legacy code to an interactive window platform**
Friedrich J., Karslioglu M.
COMPUTERS & GEOSCIENCES, vol.29, no.9, pp.1091-1100, 2003 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **Context-awareness in ubiquitous computing and the mobile devices**
Akçit N., Tomur E., KARSLIOĞLU M. O.
3rd International Conference on Remote Sensing and Geoinformation of the Environment (RSCy), Paphos, CYPRUS, 16 - 19 March 2015, vol.9535
- II. **IMPORTANCE OF THE SPATIAL DATA AND THE SENSOR WEB IN THE UBIQUITOUS COMPUTING AREA**
Akçit N., Tomur E., KARSLIOĞLU M. O.
2nd International Conference on Remote Sensing and Geoinformation of the Environment (RSCy), Paphos, CYPRUS, 7 - 10 April 2014, vol.9229
- III. **Airborne Laser Scanning Data for Tree Characteristics Detection**
Vazirabad Y. F., KARSLIOĞLU M. O.
ISPRS Istanbul Workshop on Modeling of Optical Airborne and Spaceborne Sensors, İstanbul, Turkey, 11 - 13 October 2010
- IV. **Development of GIS Based Emergency Management System for Underground Coal Mine Safety**
Şalap S., KARSLIOĞLU M. O., DEMİREL N.
11th International Symposium on Environmental Issues and Waste Management in Energy and Mineral Production (SWEMP), BANFF, ALBERTA, Canada, 16 - 19 November 2009, pp.388-395
- V. **Yeraltı Madenciliği Emniyetiyle İlgili Coğrafi Bilgi Sistemleri Tabanlı Bir İzleme ve İşletme Sisteminin Geliştirilmesi**
Şalap S., KARSLIOĞLU M. O., DEMİREL N.
TMMOB Coğrafi Bilgi Sistemleri Kongresi, İzmir, Turkey, 2 - 06 November 2009, pp.1-8
- VI. **Near Real Time Orbit Determination of BILSAT-1**
Erdogan E., KARSLIOĞLU M. O.

4th International Conference on Recent Advances in Space Technologies, İstanbul, Turkey, 11 - 13 June 2009, pp.648-649

VII. Wavelet-Based Outlier Detection of Airborne Laser Scanning Data

Akyay T., KARSLIOĞLU M. O.

4th International Conference on Recent Advances in Space Technologies, İstanbul, Turkey, 11 - 13 June 2009, pp.426-427

VIII. Yeraltı Madenciliğiyle İlgili Coğrafi Bilgi Sistemleri Tabanlı Bir İzleme ve İşletme Sisteminin Geliştirilmesi

ŞALAP S., KARSLIOĞLU M. O., DEMİREL N.

1. CBS Günleri Sempozyumu, Ankara, Turkey, 19 - 21 November 2008, pp.355-363

IX. Error analysis and testing of DRM for frame cameras

Bettemir O. H., KARSLIOĞLU M. O., Friedrich J.

3rd International Conference on Recent Advances in Space Technologies, İstanbul, Turkey, 14 - 16 June 2007, pp.349-350

X. A ground-based orbit determination for BILSAT

Karslioglu M., Friedrich J., Urhan H.

2nd International Conference on Recent Advances in Space Technologies, İstanbul, Turkey, 9 - 11 June 2005, pp.155-158

Metrics

Publication: 25

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