

Doç.Dr. Esra Erten

Kişisel Bilgiler

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Biyografi

Esra Erten received the Ph.D. degree in Computer Vision and Remote Sensing from the Department of Computer Engineering and Microelectronics, Technische Universität Berlin, Berlin, Germany, in 2010. She was with the High-Frequency Institute, German Aerospace Center (DLR), Oberpfaffenhofen, Germany, from April 2008 to June 2010, where she worked on information theory for multi-channel SAR images. From 2010 to 2012, she was with the Chair of Earth Observation and Remote Sensing, Institute of Environmental Engineering, ETH Zurich, Switzerland, where she worked on applied radar remote sensing for environmental parameter estimation. In 2018 she was a visiting professor at Satellite Applications Catapult, U.K. She was supported by Sabbatical Professorship at The Open University School of Engineering, U. K., during 2018-2019 academic period. Currently, she is an associated professor at the department of Geomatics Engineering, Faculty of Civil Engineering, Istanbul Technical University, Turkey. Her research interests include information extraction and image understanding from SAR and optical images; in particular information theory, multivariate statistics, fotogrammetry, polarimetry and interferometry.

Eğitim Bilgileri

Doktora, Technische Universitaet Berlin, Institute Of Computer Engineering And Microelectronics, Computer Vision And Remote Sensing , Almanya 2005 - 2010

Yaptığı Tezler

Doktora, Information theory of multi-temporal SAR systems with application to motion detection and change detection, Technische Universitaet Berlin, Computer Vision And Remote Sensing, Department Of Computer Engineering And Microelectronics, 2010

Araştırma Alanları

Elektrik-Elektronik Mühendisliği, Elektromanyetik, Dalga Yayılımı ve Uzaktan Algılama, Mühendislik ve Teknoloji

Akademik Unvanlar / Görevler

Doç.Dr., İstanbul Teknik Üniversitesi, İnşaat Fakültesi, Geomatik Mühendisliği Bölümü, 2013 - Devam Ediyor

Yrd.Doç.Dr., İstanbul Teknik Üniversitesi, İnşaat Fakültesi, Geomatik Mühendisliği Bölümü, 2012 - 2013

Yrd.Doç.Dr., Eidgenössische Technische Hochschule, Ethz (The Federal Institute Of Technology, Zürich), Department Of Civil, Environmrntal And Geomatics Engineering, Earth Observation And Remote Sensing / Environmental Engineering, 2010 - 2012

Yönetilen Tezler

- Erten E., IDENTIFICATION OF TEA PLANTATION AREAS USING GOOGLE CLOUD BASED RANDOM FOREST AND DEEP LEARNING, Yüksek Lisans, B.ÖZEN(Öğrenci), 2020
- Erten E., Assessment of water quality and aquatic diversity of an open-pit gold mine area using random forest algorithm with Google Earth engine, Yüksek Lisans, Ş.ALKAN(Öğrenci), 2020
- Erten E., Multi-output regressions for estimating crop's biophysical parameters from polsar data, Yüksek Lisans, Z.MELTEM(Öğrenci), 2019
- Erten E., Paddy-rice leaf area index (LAI) estimation using radar and optical imagery, Yüksek Lisans, E.Najatashendi(Öğrenci), 2017
- Erten E., Monitoring Rice Fields Using Synthetic Aperture Radar (<https://doi.org/10.3929/ethz-a-010881952>), Doktora, O.Yuzugullu(Öğrenci), 2017
- Erten E., Multi-temporal co-polar X-band SAR data classification as a tool for paddy-rice phenology estimation, Yüksek Lisans, Ç.Küçük(Öğrenci), 2016
- Erten E., Analysis on the Relation between Statistical Similarity Measures and Agricultural Parameters: A Case Study, Yüksek Lisans, O.Chesnokova(Öğrenci), 2012

Jüri Üyelikleri

Tez Savunma (Doktora), Suivi des glaciers alpins par combinaison d'informations hétérogènes : images SAR Haute Résolution et mesures terrain, University of Grenoble, Haziran, 2012

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayımlanan Makaleler

- I. **Selection of PolSAR Observables for Crop Biophysical Variable Estimation With Global Sensitivity Analysis**
Erten E., Taşkın Kaya G., Lopez-Sanchez J. M.
IEEE GEOSCIENCE AND REMOTE SENSING LETTERS, cilt.16, sa.5, ss.766-770, 2019 (SCI İndekslerine Giren Dergi)
- II. **The worsening impacts of land reclamation assessed with Sentinel-1: The Rize (Turkey) test case**
Erten E., Rossi C.
INTERNATIONAL JOURNAL OF APPLIED EARTH OBSERVATION AND GEOINFORMATION, cilt.74, ss.57-64, 2019 (SCI İndekslerine Giren Dergi)
- III. **Assessment of Paddy Rice Height: Sequential Inversion of Coherent and Incoherent Models**
Yüzügüllü O., Erten E., Hajnsek I.
IEEE JOURNAL OF SELECTED TOPICS IN APPLIED EARTH OBSERVATIONS AND REMOTE SENSING, cilt.11, sa.9, ss.3001-3013, 2018 (SCI İndekslerine Giren Dergi)
- IV. **Determining Rice Growth Stage with X-Band SAR: A Metamodel Based Inversion**
YUZUGULLU O., Marelli S., Erten E., Sudret B., HAJNSEK I.
REMOTE SENSING, cilt.9, sa.5, 2017 (SCI İndekslerine Giren Dergi)
- V. **Retrieval of vegetation height in rice fields using polarimetric SAR interferometry with TanDEM-X data**
Lopez-Sanchez J. M. , Vicente-Guijalba F., Erten E., Campos-Taberner M., Javier Garcia-Haro F.
REMOTE SENSING OF ENVIRONMENT, cilt.192, ss.30-44, 2017 (SCI İndekslerine Giren Dergi)
- VI. **Estimation of Rice Crop Height From X- and C-Band PolSAR by Metamodel-Based Optimization**
Yuzugullu O., Erten E., HAJNSEK I.
IEEE JOURNAL OF SELECTED TOPICS IN APPLIED EARTH OBSERVATIONS AND REMOTE SENSING, cilt.10, sa.1, ss.194-204, 2017 (SCI İndekslerine Giren Dergi)
- VII. **Retrieval of agricultural crop height from space: A comparison of SAR techniques**
Erten E., LOPEZ-SANCHEZ J. M. , YUZUGULLU O., HAJNSEK I.
REMOTE SENSING OF ENVIRONMENT, cilt.187, ss.130-144, 2016 (SCI İndekslerine Giren Dergi)
- VIII. **Paddy-Rice Phenology Classification Based on Machine-Learning Methods Using Multitemporal Co-**

Polar X-Band SAR Images

Kucuk C., TASKIN G., Erten E.

IEEE JOURNAL OF SELECTED TOPICS IN APPLIED EARTH OBSERVATIONS AND REMOTE SENSING, cilt.9, sa.6, ss.2509-2519, 2016 (SCI İndekslerine Giren Dergi)

- IX. **Polarization Impact in TanDEM-X Data Over Vertical-Oriented Vegetation: The Paddy-Rice Case Study**
Erten E., ROSSI C., YUEZUEGUELLUE O.
IEEE GEOSCIENCE AND REMOTE SENSING LETTERS, cilt.12, sa.7, ss.1501-1505, 2015 (SCI İndekslerine Giren Dergi)
- X. **Rice Growth Monitoring by Means of X-Band Co-polar SAR: Feature Clustering and BBCH Scale**
Yuzugullu O., Erten E., HAJNSEK I.
IEEE GEOSCIENCE AND REMOTE SENSING LETTERS, cilt.12, sa.6, ss.1218-1222, 2015 (SCI İndekslerine Giren Dergi)
- XI. **Paddy-Rice Monitoring Using TanDEM-X**
Rossi C., Erten E.
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, cilt.53, sa.2, ss.900-910, 2015 (SCI İndekslerine Giren Dergi)
- XII. **Glacier Velocity Estimation by Means of a Polarimetric Similarity Measure**
Erten E.
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, cilt.51, sa.6, ss.3319-3327, 2013 (SCI İndekslerine Giren Dergi)
- XIII. **A Comparison Between Coherent and Incoherent Similarity Measures in Terms of Crop Inventory**
Chesnokova O., Erten E.
IEEE GEOSCIENCE AND REMOTE SENSING LETTERS, cilt.10, sa.2, ss.303-307, 2013 (SCI İndekslerine Giren Dergi)
- XIV. **A New Coherent Similarity Measure for Temporal Multichannel Scene Characterization**
Erten E., REIGBER A., FERRO-FAMIL L., HELLWICH O.
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, cilt.50, sa.7, ss.2839-2851, 2012 (SCI İndekslerine Giren Dergi)
- XV. **Generation of three-dimensional deformation maps from InSAR data using spectral diversity techniques**
Erten E., REIGBER A., HELLWICH O.
ISPRS JOURNAL OF PHOTOGRAMMETRY AND REMOTE SENSING, cilt.65, sa.4, ss.388-394, 2010 (SCI İndekslerine Giren Dergi)
- XVI. **Glacier Velocity Monitoring by Maximum Likelihood Texture Tracking**
Erten E., REIGBER A., HELLWICH O., PRATS P.
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, cilt.47, sa.2, ss.394-405, 2009 (SCI İndekslerine Giren Dergi)

Kitap & Kitap Bölümleri

- I. **Vulnerability assessment to climate change and variability of the Mediterranean forest ecosystem**
Türkeş M., Musaoğlu N., Erten E., ÖZCAN O.
FAO, Rome , Rome, 2016

Desteklenen Projeler

Erten E., Diğer Ülkelerdeki Kamu Kurumları Tarafından Desteklenmiş Proje, A Feasibility Study To Detect Soil Moisture Using Sentinel Satellite Data, 2019 - 2020
Musaoğlu N., Erten E., Yağmur N., Bilgilioğlu B. B. , Tanık A. G. , Yükseköğretim Kurumları Destekli Proje, Konya Kapalı Havzasındaki sulak alanların optik ve SAR uydu görüntüleri ile izlenmesi, 2017 - 2019

Erten E., Yükseköğretim Kurumları Destekli Proje, Tarım Ürünlerinin Radar Görüntüleri ile Operasyonel İzlenmesi, 2017 - 2019

Erten E., Yükseköğretim Kurumları Destekli Proje, EXPLORİNG THE POTENTIAL OF TANDEM-X DATA İN RİCE MONİTORİNG, 2015 - 2018

Erten E., TÜBİTAK Projesi, Sulak ve Çeltik alanların X-band ile İzlenmesi, 2015 - 2017

Erten E., Desteklenmiş Diğer Projeler, Maximize the Production of Goods and Services of Mediterranean Forest Ecosystems in the Conntext of Global Changes in Düzlerçamı Turkey, 2015 - 2016

Erten E., Yükseköğretim Kurumları Destekli Proje, Radar Görüntüleriyle Pirinç Rekolte Tahmini, 2013 - 2016

Erten E., Desteklenmiş Diğer Projeler, Vulnerability assessment to climate change and variability of the Mediterranean forest ecosystem in the pilot site of Düzlerçamı Turkey, 2015 - 2015

Bilimsel Kuruluşlardaki Üyelikler / Görevler

IEEE Geoscience and Remote Sensing Society, Başkan, 2015 - Devam Ediyor

Bilimsel Hakemlikler

Remote Sensing of Environment, SCI Kapsamındaki Dergi, Temmuz 2017

ISPRS Photogrammetry and Remote Sensing, SCI Kapsamındaki Dergi, Haziran 2017

IEEE Geoscience and Remote Sensing Letters, SCI Kapsamındaki Dergi, Şubat 2017

IEEE Transactions on Geoscience and Remote Sensing, SCI Kapsamındaki Dergi, Ocak 2017

Bilimsel Danışmanlıklar

YP Remote Sensing 2016 Young Professionals Conference on Remote Sensing, Kurum veya Organizasyonlar İçin Yapılan Danışmanlık, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, Geomatik Mühendisliği Bölümü, Türkiye, 2016 - 2018

Bilimsel Araştırma / Çalışma Grubu Üyelikleri

IEEE Geoscience and Remote Sensing Society, IEEE, United States Of America, <https://www.grss-ieee.org/community/chapters/>, 2015 - Devam Ediyor

Davetli Kongre ve Sempozyum Faaliyetleri

Workshop: Sensors and Measurement for Agricultural Applications, Davetli Konuşmacı, Newport, İngiltere, 2018

COSMO-SkyMed Radar Science and Innovation Research (CORSAIR) Programme - Results Workshop, Moderatör, Oxford, İngiltere, 2018

2017 IEEE International Geoscience and Remote Sensing Symposium, Oturum Başkanı, Texas, Amerika Birleşik Devletleri, 2017

2017 IEEE International Geoscience and Remote Sensing Symposium, Davetli Konuşmacı, Texas, Amerika Birleşik Devletleri, 2017

25. SİNYAL İŞLEME ve İLETİŞİM UYGULAMALARI KURULTAYI, Oturum Başkanı, Antalya, Türkiye, 2017

25. SİNYAL İŞLEME ve İLETİŞİM UYGULAMALARI KURULTAYI, Moderatör, Antalya, Türkiye, 2017

2016 IEEE International Geoscience and Remote Sensing Symposium, Oturum Başkanı, Beijing, Çin, 2016

11th European Conference on Synthetic Aperture Radar, Davetli Konuşmacı, Aachen, Almanya, 2016

Yer Gözlem Uydu Uygulama Alanları ve Bütünleşik Havza Yönetimi Çalıştayı, Davetli Konuşmacı, Çorum, Türkiye, 2016

2015 IEEE International Geoscience and Remote Sensing Symposium, Davetli Konuşmacı, Milan, İtalya, 2015

Atıflar

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