



# OĐUZ GÜNGÖR

## PROF.

Email : ogungor@ankara.edu.tr  
International Researcher IDs  
ORCID: 0000-0002-3280-5466  
ScopusID: 25651575100  
Yoksis Researcher ID: 52077



### Learning Knowledge

Doctorate  
2002 - 2008

Purdue University, United States Of America

Postgraduate  
1998 - 2000

Karadeniz Technical University, Fen Bilimleri Enstitüsü, Jeodezi Ve Fotogrametri Mühendisliđi (YI) (Tezli), Turkey

Undergraduate  
1994 - 1998

Karadeniz Technical University, Mühendislik Fakültesi, Harita Mühendisliđi Bölümü, Turkey

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Multi sensor multi resolution image fusion, Purdue University, 2008

Postgraduate, Gerçek zamanlı kinematik (GZK) GPS'xxin jeodezik çalışmalarda kullanılabilirliđinin incelenmesi, Karadeniz Technical University, Dođu Dilleri Edebiyatı Araştırma Uygulama Merkezi, Jeodezi Ve Fotogrametri Mühendisliđi (YI) (Tezli), 2000

### Academic Titles / Tasks

Professor  
2020 - Continues

Ankara University, Uygulamalı Bilimler Fakültesi, Gayrimenkul Geliştirme ve Yönetimi Bölümü

Professor  
2017 - 2020

Karadeniz Technical University, Mühendislik Fakültesi, Harita Mühendisliđi Bölümü

Associate Professor  
2012 - 2017

Karadeniz Technical University, Mühendislik Fakültesi, Harita Mühendisliği  
Bölümü

Assistant Professor  
2009 - 2012

Karadeniz Technical University, Mühendislik Fakültesi, Harita Mühendisliği  
Bölümü

Research Assistant  
1998 - 2009

Karadeniz Technical University, Mühendislik Fakültesi, Harita Mühendisliği  
Bölümü

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

- 1. A Metaheuristic Optimization-Based Solution to MTF-GLP-Based Pansharpening**  
ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O.  
PFG-JOURNAL OF PHOTOGRAMMETRY REMOTE SENSING AND GEOINFORMATION SCIENCE, vol.91, no.4, pp.245-272, 2023 (SCI-Expanded)
- 2. Semantic segmentation of soil salinity using in-situ EC measurements and deep learning based U-NET architecture**  
Akca S., Gungor O.  
CATENA, vol.218, 2022 (SCI-Expanded)
- 3. A theoretical and practical survey of image fusion methods for multispectral pansharpening**  
Yilmaz C. S., Yilmaz V., GÜNGÖR O.  
INFORMATION FUSION, vol.79, pp.1-43, 2022 (SCI-Expanded)
- 4. Crowdsourcing-based application to solve the problem of insufficient training data in deep learning-based classification of satellite images**  
Saralioglu E., GÜNGÖR O.  
GEOCARTO INTERNATIONAL, vol.37, no.18, pp.5433-5452, 2022 (SCI-Expanded)
- 5. Semantic segmentation of land cover from high resolution multispectral satellite images by spectral-spatial convolutional neural network**  
Saralioglu E., GÜNGÖR O.  
Geocarto International, vol.37, no.2, pp.657-677, 2022 (SCI-Expanded)
- 6. Genetic algorithm-based synthetic variable ratio image fusion**  
YILMAZ V., Yilmaz C. S., GÜNGÖR O.  
Geocarto International, vol.36, no.9, pp.989-1006, 2021 (SCI-Expanded)
- 7. Crowdsourcing in Remote Sensing: A Review of Applications and Future Directions**  
Saralioglu E., GÜNGÖR O.  
IEEE Geoscience and Remote Sensing Magazine, vol.8, no.4, pp.89-110, 2020 (SCI-Expanded)
- 8. Pavement macrotexure determination using multi-view smartphone images**  
Tian X., Xu Y., Wei F., GÜNGÖR O., Li Z., Wang C., Li S., Shan J.  
Photogrammetric Engineering and Remote Sensing, vol.86, no.10, pp.643-651, 2020 (SCI-Expanded)
- 9. On the use of the SOS metaheuristic algorithm in hybrid image fusion methods to achieve optimum spectral fidelity**  
ŞERİFOĞLU YILMAZ Ç., YILMAZ V., GÜNGÖR O.  
International Journal of Remote Sensing, vol.41, no.10, pp.3993-4021, 2020 (SCI-Expanded)
- 10. A genetic algorithm solution to the gram-schmidt image fusion**  
YILMAZ V., ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O., Shan J.  
INTERNATIONAL JOURNAL OF REMOTE SENSING, vol.41, no.4, pp.1458-1485, 2020 (SCI-Expanded)
- 11. Metaheuristic pansharpening based on symbiotic organisms search optimization**

- ŞERİFOĞLU YILMAZ Ç., YILMAZ V., Gungor O., Shan J.  
ISPRS JOURNAL OF PHOTOGRAMMETRY AND REMOTE SENSING, vol.158, pp.167-187, 2019 (SCI-Expanded)
12. **Predicting flood plain inundation for natural channels having no upstream gauged stations**  
Kaya C. M., Tayfur G., Gungor O.  
JOURNAL OF WATER AND CLIMATE CHANGE, vol.10, no.2, pp.360-372, 2019 (SCI-Expanded)
13. **Estimating crown diameters in urban forests with Unmanned Aerial System-based photogrammetric point clouds**  
YILMAZ V., GÜNGÖR O.  
INTERNATIONAL JOURNAL OF REMOTE SENSING, vol.40, no.2, pp.468-505, 2019 (SCI-Expanded)
14. **Use of crowdsourcing in evaluating post-classification accuracy**  
Saralioglu E., GÜNGÖR O.  
EUROPEAN JOURNAL OF REMOTE SENSING, vol.52, pp.137-147, 2019 (SCI-Expanded)
15. **Investigating the performances of commercial and non-commercial software for ground filtering of UAV-based point clouds**  
ŞERİFOĞLU YILMAZ Ç., YILMAZ V., GÜNGÖR O.  
INTERNATIONAL JOURNAL OF REMOTE SENSING, vol.39, no.15-16, pp.5016-5042, 2018 (SCI-Expanded)
16. **Image classification-based ground filtering of point clouds extracted from UAV-based aerial photos**  
YILMAZ V., Konakoglu B., ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O., GÖKALP E.  
GEOCARTO INTERNATIONAL, vol.33, no.3, pp.310-320, 2018 (SCI-Expanded)
17. **Comparison of the performances of ground filtering algorithms and DTM generation from a UAV-based point cloud**  
ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O.  
GEOCARTO INTERNATIONAL, vol.33, no.5, pp.522-537, 2018 (SCI-Expanded)
18. **Determining the optimum image fusion method for better interpretation of the surface of the Earth**  
YILMAZ V., GÜNGÖR O.  
NORSK GEOGRAFISK TIDSSKRIFT-NORWEGIAN JOURNAL OF GEOGRAPHY, vol.70, no.2, pp.69-81, 2016 (SSCI)
19. **Integrating multiple texture methods and NDVI to the Random Forest classification algorithm to detect tea and hazelnut plantation areas in northeast Turkey**  
AKAR Ö., Gungor O.  
INTERNATIONAL JOURNAL OF REMOTE SENSING, vol.36, no.2, pp.442-464, 2015 (SCI-Expanded)
20. **Evaluation of random forest method for agricultural crop classification**  
Ok A. O., Akar O., Gungor O.  
European Journal of Remote Sensing, vol.45, no.1, pp.421-432, 2012 (SCI-Expanded)
21. **Evaluation of Different Outlier Detection Methods for GPS Networks**  
Goekalp E., Guengoer O., Boz Y.  
SENSORS, vol.8, no.11, pp.7344-7358, 2008 (SCI-Expanded)

## Articles Published in Other Journals

1. **Semantic segmentation of very-high spatial resolution satellite images: A comparative analysis of 3D-CNN and traditional machine learning algorithms for automatic vineyard detection**  
AKAR Ö., Saralioglu E., GÜNGÖR O., BAYATA H. F.  
INTERNATIONAL JOURNAL OF ENGINEERING AND GEOSCIENCES, vol.9, no.1, pp.12-24, 2024 (ESCI)
2. **Mass Appraisal of Residential Units in Kayseri with Multiple Regression and Geographically Weighted Regression Methods**  
Toprak M. F., Gungor O.  
Türk Uzaktan Algılama ve CBS Dergisi, vol.4, no.1, pp.114-124, 2023 (Peer-Reviewed Journal)
3. **The Effect of Point Density on Point Cloud Filtering Performance**  
ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O.  
Turkish Journal of Remote Sensing and GIS, vol.2, pp.41-46, 2021 (Peer-Reviewed Journal)

4. **Derin Öğrenme Amaçlı Etiketli Veri Üretimi İçin Bir Web Platformu**  
SARALIOĞLU E., GÜNGÖR O.  
Türk Uzaktan Algılama ve CBS Dergisi, vol.1, no.1, pp.24-33, 2020 (Peer-Reviewed Journal)
5. **Improving SVM Classification Accuracy with Image Fusion-Based Gabor Texture Features**  
ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O.  
Turkish Journal of Remote Sensing and GIS, vol.1, no.1, pp.34-44, 2020 (Peer-Reviewed Journal)
6. **LAND COVER MAPPING WITH ADVANCED CLASSIFICATION ALGORITHMS**  
ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O., KAHRAMAN H. T.  
Nature Sciences, vol.13, no.3, pp.41-50, 2018 (Peer-Reviewed Journal)
7. **KİTLE KAYNAĞIN UZAKTAN ALGILAMADA KULLANIMI**  
SARALIOĞLU E., GÜNGÖR O.  
Engineering Sciences, vol.13, no.1, pp.37-52, 2018 (Peer-Reviewed Journal)
8. **Determination of Tree Crown Diameters with Segmentation of a UAS-Based Canopy Height Model**  
YILMAZ V., ŞERİFOĞLU YILMAZ Ç., TAŞÇI L., GÜNGÖR O.  
IPSI BgD Transactions on Internet Research, vol.13, no.2, pp.63-67, 2017 (ESCI)
9. **Using UAS based point clouds to Generate High Resolution Digital Terrain Model for Forestry Research and Applications**  
ŞERİFOĞLU YILMAZ Ç., YILMAZ V., GÜNGÖR O.  
European Journal of Forest Engineering, vol.2, no.1, pp.35-40, 2016 (Peer-Reviewed Journal)
10. **Classification of multispectral images using Random Forest algorithm**  
AKAR Ö., GÜNGÖR O.  
Journal of Geodesy and Geoinformation, vol.1, no.2, 2013 (Peer-Reviewed Journal)
11. **A Novel Image Fusion Method Using IKONOS Satellite Images**  
YILDIRIM D., GÜNGÖR O.  
Journal of Geodesy and Geoinformation, vol.1, no.01, pp.27-34, 2012 (Peer-Reviewed Journal)
12. **RTK(Real Time Kinematic) GPS'in İmar Uygulamalarında Kullanılması**  
GÜNGÖR O., GÖKALP E.  
Harita Kadastro Mühendisliği Dergisi, 2001 (Peer-Reviewed Journal)

## Books & Book Chapters

1. **Detection And Management Of Tea Farmland With Remote Sensing And GIS Technologies**  
SARALIOĞLU E., GÜNGÖR O., AKAR Ö., YILMAZ V., YILDIRIM D.  
in: RESEARCH REVIEWS IN ENGINEERING, Doç. Dr. Gülden BAŞYİĞİT KILIÇ Dr. Öğr. Üyesi Ahmet ÇİFÇİ Dr. Öğr. Üyesi Altan YILMAZ, Editor, Gece Kitaplığı, Ankara, pp.5-23, 2019

## Refereed Congress / Symposium Publications in Proceedings

1. **Determination of vineyards with support vector machine and deep learning-based Image classification**  
AKAR Ö., SARALIOĞLU E., GÜNGÖR O., BAYATA H. F.  
3rd Intercontinental Geoinformation Days (IGD), Mersin, Turkey, 17 November 2021
2. **Investigation of Multiresolution Analysis-Based Pansharpening Methods**  
YILMAZ V., ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O.  
International Symposium on Applied Geoinformatics (ISAG-2019), İstanbul, Turkey, 7 - 09 November 2019, vol.1, pp.280-284
3. **A Semi-Automatic Approach to Collect Training Datasets for Ground Filtering**  
ŞERİFOĞLU YILMAZ Ç., YILMAZ V., GÜNGÖR O.  
International Symposium on Applied Geoinformatics (ISAG-2019), İstanbul, Turkey, 7 - 09 November 2019, vol.1,

pp.285-290

4. **Modified Synthetic Variable Ratio Pansharpening Method**  
YILMAZ V., ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O.  
2nd International Symposium on Innovative Approaches in Scientific Studies, 30 November - 02 December 2018
5. **Improving Hyperspectral Image Classification with Watershed Segmentation-Based Texture Features**  
ŞERİFOĞLU YILMAZ Ç., YILMAZ V., GÜNGÖR O.  
2nd International Symposium on Innovative Approaches in Scientific Studies, 30 November - 02 December 2018
6. **A Deep Learning Method for Local Climate Zone Classification**  
YILDIRIM D., Vakalopoulou M., Karantzalos K., GÜNGÖR O.  
FIG 2018, 6 - 11 May 2018
7. **Land Cover Mapping with Advanced Classification Algorithms**  
ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O., KAHRAMAN H. T.  
International Conference on Advanced Engineering Technologies (ICADET) 2017, Bayburt, Turkey, 21 - 23 September 2017
8. **Kitle Kaynağın Uzaktan Algılamada Kullanımı**  
SARALIOĞLU E., GÜNGÖR O.  
International Conference on Advanced Engineering Technologies (ICADET 2017 ), Bayburt, Turkey, 21 - 23 September 2017, pp.703-713
9. **Crown Diameter Estimation with Segmentation Techniques**  
YILMAZ V., GÜNGÖR O.  
II. International Conference on Advanced Engineering Technologies (ICADET) 2017, Bayburt, Turkey, 21 - 23 September 2017, pp.322-327
10. **Texture Based Classification of Hyperspectral Images with Support Vector Machines Classifier**  
ŞERİFOĞLU YILMAZ Ç., TUNÇ GÖRMÜŞ E., GÜNGÖR O.  
International Symposium On Gis Applications In Geography Geosciences, 18 - 21 October 2017
11. **Flood Hazard Mapping by Using Geographic Information System and Remote Sensing**  
KAYA Ç. M., DERİN L., GÜNGÖR O.  
The Disaster Risk Reduction Conference, 11 - 13 October 2017
12. **Use of Crowdsourcing in Evaluating Post-Classification Accuracy**  
SARALIOĞLU E., GÜNGÖR O.  
37th EARSeL Symposium, Prag, Czech Republic, 27 - 30 June 2017
13. **Ground Filtering of a UAV-based Point cloud with the Cloth Simulation Filtering Algorithm**  
ŞERİFOĞLU YILMAZ Ç., YILMAZ V., GÜNGÖR O.  
International Conference on Advances and Innovations in Engineering (ICAIE) 2017, Elazığ, Turkey, 10 - 12 May 2017, pp.627-630
14. **Integration of Thematic Information to UAV-Based Point Clouds for Ground Filtering**  
YILMAZ V., ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O.  
International Conference on Advances and Innovations in Engineering (ICAIE) 2017, Elazığ, Turkey, 10 - 12 May 2017, pp.618-621
15. **PREDICTING FLOOD PLAIN INUNDATION FOR NATURAL CHANNELS HAVING NO GAUGED STATIONS**  
KAYA Ç. M., TAYFUR G., GÜNGÖR O.  
IWA-PPFW 2nd IWA Regional Symposium, İzmir, Turkey, 22 - 24 March 2017
16. **Convolutional neural network classification for hazelnut plantation fields**  
YILDIRIM D., GÜNGÖR O.  
International Scientific Congress on Applied Sciences, Antalya, Turkey, 27 September - 30 December 2016
17. **Regional flood risk management framework for sustainable flood management: A case study in Giresun, Turkey**  
KAYA Ç. M., GÜNGÖR O., TUNÇ GÖRMÜŞ E.  
PRONASEM 2016, 11 - 13 November 2016
18. **Developing Long Term Damage Reduction Strategies for Pazarsuyu Creek Giresun Turkey Using a Two Dimensional Inertial Based Flood Inundation**

- KAYA Ç. M., GÜNGÖR O., Yu d.  
HS CONFERENCE 2016, Belgrade, Serbia, 4 - 05 November 2016
19. **Evrişimsel sinir ağları ile görüntü sınıflandırma**  
YILDIRIM D., GÜNGÖR O.  
8. Savunma Teknolojileri Kongresi, Ankara, Turkey, 11 - 14 October 2016
20. **Performance Comparison of Different Interpolation Techniques in Generation of DTMs from UAV Based Point Clouds**  
ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O.  
The Selçuk International Scientific Conference On Applied Sciences, Antalya, Turkey, 27 - 30 September 2016
21. **DETERMINING SUITABLE AREAS FOR MORE EFFICIENT HAZELNUT PRODUCTION**  
SARALIOĞLU E., YILDIRIM D., GÜNGÖR O.  
ISPRS 2016 - XXIII ISPRS Congress, 12 - 19 July 2016
22. **Determining Stand Parameters from UAS based Point Clouds**  
YILMAZ V., ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O.  
ISPRS 2016 - XXIII ISPRS Congress, Prag, Czech Republic, 12 - 19 July 2016
23. **Comparison of the use of aerial photos taken from manned and unmanned aerial vehicles in terms of estimation of stand parameters A case study in Mut Forest Enterprise**  
YILMAZ V., GÜNGÖR O., KADIOĞULLARI A. İ., KARSLI F., SÖNMEZ T.  
1st International Symposium of Forest Engineering and Technologies (FETEC 2016), Bursa, Turkey, 2 - 04 June 2016
24. **High Resolution Digital Terrain Model Generation from UAS Based Point Clouds**  
ŞERİFOĞLU YILMAZ Ç., YILMAZ V., GÜNGÖR O.  
1st International Symposium of Forest Engineering and Technologies (FETEC 2016), Bursa, Turkey, 2 - 04 June 2016
25. **Mineral Exploration with Hyperspectral Image Fusion**  
SARALIOĞLU E., TUNÇ GÖRMÜŞ E., GÜNGÖR O.  
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.1281-1284
26. **PERFORMANCE EVALUATION OF DIFFERENT GROUND FILTERING ALGORITHMS FOR UAV-BASED POINT CLOUDS**  
ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O., YILMAZ V.  
23rd Congress of the International-Society-for-Photogrammetry-and-Remote-Sensing (ISPRS), Prague, Czech Republic, 12 - 19 July 2016, vol.41, pp.245-251
27. **Queries of Agricultural Areas Falling into Cadastral Parcels and Organizing and Analyzing Them with Python Programming Language**  
SARALIOĞLU E., YILDIRIM D., GÜNGÖR O.  
FIG Working Week 2015, 17 - 21 May 2015
28. **An optimal fusion approach for optical and SAR images**  
GÜNGÖR O., shan j.  
Proceedings of the ISPRS Commission VII Mid-term Symposium "Remote Sensing: From Pixels to Processes, 8 - 11 May 2006, pp.111-116
29. **Performance evaluation for pan-sharpening techniques**  
Du Q., Gungor O., Shan J.  
25th IEEE International Geoscience and Remote Sensing Symposium (IGARSS 2005), Seoul, South Korea, 25 - 29 July 2005, pp.4264-4266

## Academic and Administrative Experience

---

2023 - Continues	<b>Dış İlişkiler Koordinatörü</b>	Ankara University, Uygulamalı Bilimler Fakültesi, Gayrimenkul Geliştirme ve Yönetimi Bölümü
------------------	---------------------------------------	--

---

## Courses

Surveying and Map Information, Postgraduate, 2021 - 2022  
GIS, Undergraduate, 2021 - 2022  
İleri Uzaktan Algılama, Coğrafi Bilgi Sistemleri Ve Uygulamaları, Doctorate, 2021 - 2022  
Remote Sensing, Undergraduate, 2022 - 2023  
Land Surveying-1, Undergraduate, 2022 - 2023  
Uzaktan Algılama Ve Coğrafi Bilgi Sistemleri, Postgraduate, 2021 - 2022  
Ölçme Bilgisi-2, Undergraduate, 2021 - 2022  
Gayrimenkul Sektöründe Dijitalleşme Ve Teknolojileri, Postgraduate, 2021 - 2022

## Advising Theses

Güngör O., Derin öğrenme tabanlı konut değerlendirme, Doctorate, M.FATİH(Student), 2024  
Güngör O., Uzaktan algılanmış görüntülerde mask R-CNN kullanımı, Postgraduate, B.SARALIOĞLU(Student), 2022  
GÜNGÖR O., Derin öğrenme ile Harran ovası toprak tuzluluğunun tespiti, Postgraduate, Ş.AKÇA(Student), 2020  
GÜNGÖR O., Metaheuristic pansharpening based on symbiotic organisms search optimization, Doctorate, Ç.ŞERİFOĞLU(Student), 2020  
GÜNGÖR O., Derin öğrenme için kitle kaynak tabanlı etiketli veri üretimi ve çok bantlı görüntü sınıflandırma için bir 3d-2d cnn modeli, Doctorate, E.SARALIOĞLU(Student), 2020  
GÜNGÖR O., Lokasyon tabanlı kasis uyarıcı uygulama, Postgraduate, B.ERGINÖZ(Student), 2020  
GÜNGÖR O., Türkiye'de taşkın haritalarının bazı Avrupa ülkelerindeki uygulamalar ile karşılaştırılması, Postgraduate, H.YURTSEVER(Student), 2018  
GÜNGÖR O., Estimating basic forest stand parameters from UAS images, Doctorate, V.YILMAZ(Student), 2017  
GÜNGÖR O., Akım gözlem istasyonu bulunmayan taşkın havzalarındaki değişimlerin taşkın riskine etkisinin belirlenmesi: Rize, Güneysu örneği, Doctorate, Ç.MELİSA(Student), 2017  
GÜNGÖR O., İha tabanlı 3 boyutlu nokta bulutlarında zemin üstü nokta filtreleme algoritmalarının ve sam üretme yöntemlerinin karşılaştırılması, Postgraduate, Ç.ŞERİFOĞLU(Student), 2016  
GÜNGÖR O., Python programlama dili kullanılarak uzaktan algılama amaçlı arayüz tasarımı, Postgraduate, E.SARALIOĞLU(Student), 2015  
GÜNGÖR O., A statistical-based fusion technique for remote sensing images, Postgraduate, D.YILDIRIM(Student), 2013  
GÜNGÖR O., Rastgele orman sınıflandırıcısına doku özellikleri entegre edilerek benzer spektral özellikteki tarımsal ürünlerin sınıflandırılması, Doctorate, Ö.AKAR(Student), 2013  
GÜNGÖR O., Görüntü kaynaştırma yöntemlerinde performans analizi, Postgraduate, V.YILMAZ(Student), 2012  
GÜNGÖR O., Giresun Pazarsuyu örneğinde, coğrafi bilgi sistemleri ve uzaktan algılama entegrasyonu ile taşkın risk haritalarının üretilmesi, Postgraduate, Ç.MELİSA(Student), 2012

## Metrics

Publication: 64  
Citation (WoS): 712  
Citation (Scopus): 807  
H-Index (WoS): 15  
H-Index (Scopus): 15

## Research Areas

Geographic Information Systems, Photogrammetry, Measuring Technique, Remote sensing, Earth Observations (Remote Sensing)