

# Prof. Fatih GÜLGEN

## Personal Information

Web: <https://avesis.yildiz.edu.tr/fgulgen>

## International Researcher IDs

ScholarID: bM2Tw9EAAAAJ

ORCID: 0000-0002-8754-9017

Publons / Web Of Science ResearcherID: AAP-4477-2020

ScopusID: 35788093700

Yoksis Researcher ID: 174079

## Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Geomatic Engineering, Turkey 2003 - 2009

Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Geodesy and Photogrammetry Engineering, Turkey 2000 - 2003

Undergraduate, Yildiz Technical University, Faculty Of Civil Engineering, Turkey 1995 - 1999

## Dissertations

Doctorate, A New Selection/Elimination Approach for the Generalization of Urban Road Networks, Yildiz Technical University, Graduate School of Natural and Applied Sciences, Geomatic Engineering , 2009

Postgraduate, Automatic Extraction of Skeleton Lines of A Terrain from Digital Elevation Models, Yildiz Technical University, Graduate School of Natural and Applied Sciences, Geodesy and Photogrammetry Engineering, 2003

## Research Areas

Cartography, Geotechnical Engineering, Geographic Information Systems, Environmental Information Systems, City Information Systems, Map, Map Networks, Map Projections, Map Design, Map Production, Internet-GIS, Multi-Criteria Decision Making Analysis, Engineering and Technology

## Academic Titles / Tasks

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

Associate Professor, Yildiz Technical University, Faculty Of Civil Engineering, Geomatic Engineering, 2015 - 2021

Assistant Professor, Yildiz Technical University, Faculty Of Civil Engineering, Geomatic Engineering, 2011 - 2015

Research Assistant PhD, Yildiz Technical University, Faculty Of Civil Engineering, Geomatic Engineering, 2009 - 2011

Research Assistant, Yildiz Technical University, Faculty Of Civil Engineering, Geomatic Engineering, 2001 - 2009

## Academic and Administrative Experience

Vice Dean, Yildiz Technical University, Faculty Of Civil Engineering, 2020 - 2024

Fakülte Yönetim Kurulu Üyesi, Yıldız Technical University, Faculty of Civil Engineering, 2016 - 2021

Deputy Head of Department, Yıldız Technical University, Faculty of Civil Engineering, Geomatic Engineering, 2013 - 2017

## Advising Theses

Gülgen F., Çelen M., Monitoring Changes in River Hydromorphology using an Interdisciplinary Approach: The Case Study of Saz-Çayırova Stream, Doctorate, B.KILIÇ(Student), 2024

Gülgen F., The Development of the Smart City Index Model and Examination of its Applicability, Doctorate, F.KAFALI(Student), 2023

Gülgen F., Determination of Energy Transmission Line Routes Using Spatial Decision Making Techniques, Postgraduate, O.SELEN(Student), 2022

Gülgen F., Stride Length Estimation and Analysis of Methods in Pedestrian Navigation, Postgraduate, N.KARAGÖZ(Student), 2022

Gülgen F., Accuracy Analysis for Indoor Navigation with Augmented Reality, Postgraduate, S.HAMDİ(Student), 2022

Gülgen F., Ateş A. M., Evaluation of Floating Photovoltaic Power Plants with The Help of Remote Sensing and Geographic Information Systems: Example of Demirköprü Dam, Doctorate, O.Yılmaz(Student), 2021

Gülgen F., Postgraduate, C.Boz(Student), 2019

Gülgen F., Estimation of the Real-Estate Appraisal Using Scoring Method and Investigation with Quality of Life, Postgraduate, G.Yağmahan(Student), 2019

Bilgi S., Gülgen F., Analyzing Spatial Evolution of Yıldız Technical University Davutpasa Campus with Space Syntax Methodology, Postgraduate, Ö.Öztürk(Student), 2018

Gülgen F., Quality Investigation in Address-Based Geocoding Process, Postgraduate, B.Kılıç(Student), 2017

Gülgen F., Digital Map Generalization and Labelling of Multi-Scale Street Networks, Postgraduate, W.Shoman(Student), 2016

## Jury Memberships

Post Graduate, Finding The Best Locations for Photovoltaic panel Installation in Urbanized Areas , İTÜ Fen Bilimleri Enstitüsü, December, 2017

Post Graduate, GIS for Watershed Management, İTÜ Fen Bilimleri Enstitüsü, December, 2017

Post Graduate, Araç Park Alanı Yeri Seçiminde Çok Ölçütlü Mekansal Karar Verme Tekniklerinin Kullanımı , YTÜ - Fen Bilimleri Enstitüsü, July, 2016

Post Graduate, Large Scale Landform Mapping Using Lidar DEM, YTÜ - Fen Bilimleri Enstitüsü, October, 2015

Post Graduate, Mekansal Veri Altyapılarında Geometrik Entegrasyon , YTÜ - Fen Bilimleri Enstitüsü, August, 2015

Post Graduate, Bina Nesnelerinin Citygml Standardına göre LoD2 ve LoD3 Ayrıntı Düzeylerinde Üç Boyutlu Modellenmesi, YTÜ - Fen Bilimleri, June, 2014

Post Graduate, Eğitim Amaçlı Binalar için Topografik ve Kentsel Ontolojilerin Oluşturulması, YTÜ-Fen Bilimleri Enstitüsü, January, 2014

## Research Infrastructure Information

Gökgöz T., Başaraner A. M., Gülgen F., Cartographic Production Laboratory, January 2010

## Education Infrastructure Information

Gökgöz T., Başaraner A. M., Gülgen F., Cartographic Production Laboratory, January 2010

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

- I. **Comparative Evaluation of Multi-Criteria Decision Making Methods for River Hydromorphology Assessment: Case Study of the Saz-Çayırova Basin, Türkiye**  
Kılıç B., Gülgen F., Çelen M.  
RIVERS RESEARCH AND APPLICATIONS : AN INTERNATIONAL JOURNAL DEVOTED TO RIVER RESEARCH AND MANAGEMENT, vol.1, no.1, pp.1-21, 2024 (SCI-Expanded)
- II. **Unveiling the impact of machine learning algorithms on the quality of online geocoding services: a case study using COVID-19 data**  
Kılıç B., Bayrak O. C., Gülgen F., Gürtürk M., Abay P.  
Journal of Geographical Systems, 2024 (SSCI)
- III. **A novel approach suggestion for assessing the impact of topographic shading on the estimation of the floating photovoltaic technical potential**  
Yılmaz O. S., Ateş A. M., Gülgen F.  
ENERGY, vol.283, pp.1-14, 2023 (SCI-Expanded)
- IV. **Effects of reverse geocoding on OpenStreetMap tag quality assessment**  
Kılıç B., Hacı M., Gülgen F.  
TRANSACTIONS IN GIS, vol.27, no.5, pp.1599-1613, 2023 (SSCI)
- V. **The Performance Analysis of Different Water Indices and Algorithms Using Sentinel-2 and Landsat-8 Images in Determining Water Surface: Demirkopru Dam Case Study**  
Yılmaz O. S., Gülgen F., Balık Şanlı F., Ates A. M.  
Arabian Journal for Science and Engineering, vol.48, no.6, pp.7883-7903, 2023 (SCI-Expanded)
- VI. **Mapping burn severity and monitoring CO content in Türkiye's 2021 Wildfires, using Sentinel-2 and Sentinel-5P satellite data on the GEE platform**  
Yılmaz O. S., Acar U., Sanli F. B., Gulgen F., Ates A. M.  
EARTH SCIENCE INFORMATICS, vol.16, no.1, pp.221-240, 2023 (SCI-Expanded)
- VII. **Evaluating the effects of soil data quality on the SWAT runoff prediction Performance; A case study of Saz-Cayırova catchment, Turkey**  
Oruç H. N., Çelen M., GÜLGEN F., Öncel M. S., Vural S., KILIÇ B.  
Urban Water Journal, vol.20, no.10, pp.1592-1607, 2023 (SCI-Expanded)
- VIII. **Using remote sensing to calculate floating photovoltaic technical potential of a dam's surface**  
Ates A. M., Yılmaz O. S., GÜLGEN F.  
SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.41, 2020 (SCI-Expanded)
- IX. **Evaluation of the Space Syntax Measures Affecting Pedestrian Density through Ordinal Logistic Regression Analysis**  
Hacı O. O., GÜLGEN F., Bilgi S.  
ISPRS INTERNATIONAL JOURNAL OF GEO-INFORMATION, vol.9, no.10, 2020 (SCI-Expanded)
- X. **Investigating the quality of reverse geocoding services using text similarity techniques and logistic regression analysis**  
Kılıç B., Gülgen F.  
Cartography and Geographic Information Science, vol.47, no.4, pp.336-349, 2020 (SSCI)
- XI. **Labelling Hierarchy for Street Maps Using Centrality Measures**  
Shoman W., Gülgen F.  
CARTOGRAPHIC JOURNAL, vol.55, pp.68-84, 2018 (SSCI)
- XII. **Centrality-based hierarchy for street network generalization in multi-resolution maps**  
Shoman W., Gülgen F.  
GEOCARTO INTERNATIONAL, vol.32, pp.1352-1366, 2017 (SCI-Expanded)
- XIII. **A stream ordering approach based on network analysis operations**  
GÜLGEN F.  
GEOCARTO INTERNATIONAL, vol.32, no.3, pp.322-333, 2017 (SCI-Expanded)
- XIV. **Road hierarchy with integration of attributes using fuzzy-AHP**

- Gulgen F.  
GEOCARTO INTERNATIONAL, vol.29, no.6, pp.688-708, 2014 (SCI-Expanded)
- XV. **A block-based selection method for road network generalization**  
Gülgen F., Gökgöz T.  
INTERNATIONAL JOURNAL OF DIGITAL EARTH, vol.4, pp.133-153, 2011 (SCI-Expanded)
- XVI. **A NEW ALGORITHM FOR EXTRACTION OF CONTINUOUS CHANNEL NETWORKS WITHOUT PROBLEMATIC PARALLELS FROM HYDROLOGICALLY CORRECTED DEMS**  
Gülgen F., Gökgöz T.  
BOLETIM DE CIENCIAS GEODESICAS, vol.16, pp.20-38, 2010 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Determination of the appropriate zone on dam surface for Floating Photovoltaic System Installation using RS and GISc technologies**  
Yılmaz O. S., Gülgen F., Ateş A. M.  
INTERNATIONAL JOURNAL OF ENGINEERING AND GEOSCIENCES, vol.8, no.1, pp.63-75, 2023 (ESCI)
- II. **COVID-19 hastalarının izlenmesinde çevrimiçi coğrafi kodlama servislerinin karşılaştırmalı analizi**  
KILIÇ B., GÜLGEN F., KOCATAŞ A., GÜRTÜRK M., ABAY P., YILMAZ Y., ANATACA G.  
Journal of Geodesy and Geoinformation, vol.9, no.2, pp.95-107, 2022 (Peer-Reviewed Journal)
- III. **Morphometric Analysis of Saz-Çayırova Drainage Basin using Geographic Information Systems and Different Digital Elevation Models**  
Kılıç B., Gülgen F., Çelen M., Öncel M. S., Oruç H. N., Vural S.  
International Journal of Environment and Geoinformatics, vol.9, no.2, pp.177-186, 2022 (Peer-Reviewed Journal)
- IV. **Investigating the Effect of Shading on the Capacity Factor of Floating Photovoltaic Systems**  
ATEŞ A. M., YILMAZ O. S., GÜLGEN F.  
Celal Bayar Üniversitesi Fen Bilimleri Dergisi, vol.18, no.3, pp.309-319, 2022 (Peer-Reviewed Journal)
- V. **Determination of Mucilage in The Sea of Marmara Using Remote Sensing Techniques with Google Earth Engine**  
ACAR U., YILMAZ O. S., ÇELEN M., ATEŞ A. M., GÜLGEN F., BALIK ŞANLI F.  
International Journal of Environment and Geoinformatics, vol.8, no.4, pp.423-434, 2021 (Peer-Reviewed Journal)
- VI. **DETERMINING HIGHWAY SLOPE RATIO USING A METHOD BASED ON SLOPE ANGLE CALCULATION IN GIS ENVIRONMENT.**  
YILMAZ O. S., ÖZKAN G., GÜLGEN F.  
International Journal of Engineering and Geosciences, vol.6, no.2, pp.98-103, 2021 (ESCI)
- VII. **Analysis of Forest Fire Severity Using The Google Earth Engine and Geographical Information Systems: Hatay-Belen Case Study**  
Yılmaz O. S., Oruç M. S., Ateş A. M., Gülgen F.  
İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.11, no.2, pp.1519-1532, 2021 (Peer-Reviewed Journal)
- VIII. **Artırılmış gerçeklik teknolojisi ile iç mekân navigasyonu**  
ÇALIK S. H., GÜLGEN F.  
Türkiye Coğrafi Bilgi Sistemleri Dergisi, vol.3, no.1, pp.48-52, 2021 (Peer-Reviewed Journal)
- IX. **ACCURACY AND SIMILARITY ASPECTS IN ONLINE GEOCODING SERVICES: A COMPARATIVE EVALUATION FOR GOOGLE AND BING MAPS**  
Kılıç B., Gülgen F.  
INTERNATIONAL JOURNAL OF ENGINEERING AND GEOSCIENCES, vol.5, pp.109-119, 2020 (ESCI)
- X. **Türkiye’de Kullanılan Posta Adres Bilgilerinde Uyum Düzeylerinin Belirlenmesi**  
KILIÇ B., GÜLGEN F.  
Harita Dergisi, vol.85, no.161, pp.26-34, 2019 (Peer-Reviewed Journal)
- XI. **Investigation of Land Use Change with Remote Sensing Techniques, The Case of Köprübaşı District**  
Yılmaz O. S., Gülgen F., Güngör R., Kadi F.

## Books & Book Chapters

- I. **Coğrafi Bilgi Sistemi ve Uzaktan Algılama Tekniklerinin Güneş Enerji Santrali Uygulamaları Üzerindeki Rolü**  
YILMAZ O. S., GÜLGEN F.  
in: Mühendislik Alanında Araştırma ve Değerlendirmeler - 1, Coşkun Özalp, Nurettin Akçakale, Editor, Gece Kitaplığı, Ankara, pp.33-48, 2022
- II. **Netcad 8.0 ile Haritacılık Uygulamaları**  
YILMAZ O. S., GÜNGÖR R., GÜLGEN F.  
Atlas Akademi Yayınları, Konya, 2021
- III. **A Model for Tracking the Amount and the Yield of Agricultural Product Using GIS**  
Karabulut M. F., Kılıç B., Yılmaz Y., Gülgen F.  
in: Contemporary Studies in Environment and Tourism, Efe R., Öztürk M., Editor, Cambridge Scholars Publishing, Newcastle Upon Tyne, pp.499-506, 2017

## Refereed Congress / Symposium Publications in Proceedings

- I. **From streets to screens: A deep dive into urban configuration and Google reviews**  
Hacar M., Öztürk Hacar Ö., Altafini D., Pappalardo L., Gülgen F., Cutini V.  
14th Space Syntax Conference, Lefkosia, Cyprus (Gkry), 24 - 28 June 2024, pp.1-17
- II. **Does time matter? Temporal Dynamics and Configurational Hierarchy in Pedestrian Movement**  
Mara F., Altafini D., Öztürk Hacar Ö., Hacar M., Gülgen F., Cutini V.  
14th Space Syntax Conference, Lefkosia, Cyprus (Gkry), 24 - 28 June 2024, pp.1-18
- III. **Şubat 2023 Depremlerinin Bölgede Oluşturduğu Etkiler ve Yapay Zeka ile Afet Yönetim Planlaması**  
Doğan U., Yüzer N., Acar U., Akbaba M. F., Akbulut M. T., Akgün C., Akın O., Akkaya H. C., Akpınar B., Aktaş Z., et al.  
Türkiye Ulusal Jeodezi Komisyonu (TUJK) XXII. Sempozyumu 2023, Trabzon, Turkey, 29 November - 01 December 2023, pp.5-6
- IV. **Sanayi Baskısı Altında Bulunan Akarsularda Hidromorfolojik Değişim Düzeylerinin Coğrafi Bilgi Bilimi ve Teknolojisi Kullanılarak Belirlenmesi: Çayırova-Saz Deresi örneği**  
Gülgen F., Kılıç B., Çelen M., Oruç H. N., Vural S., Öncel M. S., Engin G., Karpuzcu M., Balık Şanlı F.  
TMMOB 7. Coğrafi Bilgi Sistemleri Kongresi, Ankara, Turkey, 3 - 05 October 2022, pp.1-4
- V. **Enerji Nakil Hat Güzergâhlarının Belirlenmesinde Karar Destek Sistemlerinin Rolü**  
Selen O., Kılıç B., Gülgen F.  
XI. TÜRKİYE ULUSAL FOTOGRAMETRİ VE UZAKTAN ALGILAMA BİRLİĞİ TEKNİK SEMPOZYUMU, Mersin, Turkey, 12 - 14 May 2022, pp.42
- VI. **Determination of Primary Surface Water Pollution Indicators by Multivariate Statistical Techniques in an Industrialized Basin**  
ORUÇ H. N., ÖNCEL M. S., ENGİN G., GÜLGEN F., KARPUZCU M., VURAL S., KILIÇ B., ÇELEN M.  
7th International Conference on Geotechnical Research and Engineering (ICGRE'22), LÍZBON, Portugal, 10 - 12 April 2022, no.166, pp.1-12
- VII. **The role of topographic maps in river hydromorphology**  
KILIÇ B., GÜLGEN F., ÇELEN M., ÖNCEL M. S., ORUÇ H. N., VURAL S.  
30th International Cartographic Conference (ICC 2021), FLORANSA, Italy, 14 - 18 December 2021, vol.3, no.149, pp.1-2
- VIII. **Comparing the basin morphometric parameters derived from freely available DEMs and topographic dataset: A case study of Saz-Çayırova basin, Turkey**  
Kılıç B., Gülgen F., Çelen M., Öncel M. S., Oruç H. N., Vural S.

International Symposium on Applied Geoinformatics (ISAG2021), Riga, Latvia, 02 December 2021

- IX. **Comparative analysis of pedestrian stride length estimation methods**  
Karagöz N., GÜLGEN F.  
3rd Intercontinental Geoinformation Days, Mersin, Turkey, 17 - 18 November 2021, pp.74-77
- X. **Evaluation of different DEM resolutions derived from topographic maps for basin morphometric analysis**  
KILIÇ B., GÜLGEN F., ÇELEN M., ÖNCEL M. S., ORUÇ H. N., VURAL S.  
Mediterranean Geosciences Union (MedGU-21), İstanbul, Turkey, 25 - 28 November 2021
- XI. **Indoor navigation application using augmented reality technology**  
Çalık S. H., GÜLGEN F.  
1st Intercontinental Geoinformation Days (IGD), Mersin, Turkey, 25 - 26 November 2020, pp.162-165
- XII. **Sensitivity of the SWAT Model to Soil Data Parameterization; Case Study in Saz - Çayırova Stream, Turkey**  
Oruç H. N., Çelen M., Gülgen F., Öncel M. S., Vural S., Kılıç B.  
5th EurAsia Waste Management Symposium, İstanbul, Turkey, 26 - 28 October 2020, pp.503-513
- XIII. **Evaluation of Photovoltaic Energy Potential of Adıgüzel Dam Surface (in Turkish)**  
Ateş A. M., Yılmaz O. S., Gülgen F.  
Hezarfen Uluslararası Fen Matematik ve Mühendislik Kongresi, İzmir, Turkey, 8 - 10 November 2019
- XIV. **Determination of Optimum Route and Highway Cut Slope Angle in Geographic Information Systems (in Turkish)**  
Yılmaz O. S., Özkan G., Gülgen F.  
Hezarfen Uluslararası Fen Matematik ve Mühendislik Kongresi, İzmir, Turkey, 8 - 10 November 2019
- XV. **Investigation of Performance of Different Algorithms and Water Indices Using Sentinel-2 (MSI) Images to Determine Water Surface Boundaries of Demirköprü Dam**  
Yılmaz O. S., Gülgen F., Balık Şanlı F., Ateş A. M.  
Hezarfen Uluslararası Fen Matematik ve Mühendislik Kongresi, İzmir, Turkey, 8 - 10 November 2019
- XVI. **Updating of Turkish Snow Zone Data Used for Disaster Management by Geographic Information Systems**  
Karagoz N., Gülgen F., Peker K.  
idRc 2019 - International Disaster and Resilience Congress, "from Risk to Resilience", Eskişehir, Turkey, 26 - 28 June 2019, pp.1
- XVII. **Use of Geographic Information Systems in Evaluation of Meteorological Extreme Value Distributions and Disaster Management**  
Karagöz N., Gülgen F., Taşkın K., Peker K.  
idRc 2019 - International Disaster and Resilience Congress, "from Risk to Resilience", Eskişehir, Turkey, 26 - 28 June 2019, pp.1
- XVIII. **Taşınmaz değerlendirilmede Coğrafi Bilgi Sistemlerinin kullanılması: Mardin Midyat örneği**  
Yağmahan G., GÜLGEN F.  
VII. UZAKTAN ALGILAMA-CBS SEMPOZYUMU (UZAL-CBS 2018), Eskişehir, Turkey, 18 - 21 September 2018
- XIX. **Observing the Effects of Traffic Regulations Using SUMO Traffic Simulation**  
Boz C., Gülgen F.  
VII. UZAKTAN ALGILAMA CBS SEMPOZYUMU, Eskişehir, Turkey, 18 September 2018, vol.1, no.1, pp.467-471
- XX. **Investigation of the Effect of Vaporization on the Dam Lake on Solar Energy Plant Performance**  
Ateş A. M., Yılmaz O. S., Kestane Ö., Gülgen F., Ülgen K.  
III. Uluslararası Mesleki ve Teknik Bilimler Kongresi, Gaziantep, Turkey, 21 - 22 June 2018
- XXI. **Accessibility Analysis of Street Networks Using Space Syntax**  
Öztürk Ö., Gülgen F., Bilgi S., Kılıç B.  
7th International Conference on Cartography & GIS, Burgas, Bulgaria, 18 - 23 June 2018, vol.1, pp.352-360
- XXII. **An Algorithm Determining the Front Edge of Buildings to Place POIs**  
Gülgen F., Kılıç B., Öztürk Ö.  
7th International Conference on Cartography & GIS, Burgas, Bulgaria, 18 - 23 June 2018, vol.1, pp.376-383

- XXIII. **Starting a spatial open data initiative for Turkey**  
SHOMAN W., Kafalı F., GÜLGEN F.  
FIG Congress 2018 Embracing our smart world where the continents connect: Enhancing the geospatial maturity of societies, İstanbul, Turkey, 6 - 11 May 2018, pp.1-13
- XXIV. **EXAMINING THE SIMILARITY OF POSTAL ADDRESS COMPONENTS IN TURKEY**  
Kılıç B., Gülgen F., Öztürk Hacı Ö.  
7th International Conference on Cartography and GIS, Sozopol, Bulgaria, 18 - 23 June 2018, pp.401-407
- XXV. **A Research on Standard Address Usage in Turkey**  
Kılıç B., Gülgen F.  
UCTEA International Geographical Information Systems Congress 2017, Adana, Turkey, 15 - 18 November 2017, pp.149-153
- XXVI. **Assessing the Accuracy of OpenStreetMap Building Dataset in Istanbul, Turkey**  
Boz C., Gülgen F.  
INTERNATIONAL SYMPOSIUM ON GIS APPLICATIONS IN GEOGRAPHY GEOSCIENCES, Çanakkale, Turkey, 18 - 21 October 2017, pp.156
- XXVII. **Comparing the Performance of Reverse Geocoding Services: Google and Bing Maps**  
Kılıç B., Gülgen F.  
INTERNATIONAL SYMPOSIUM ON GIS APPLICATIONS IN GEOGRAPHY GEOSCIENCES, Çanakkale, Turkey, 18 - 21 October 2017, pp.155-161
- XXVIII. **Contour Mapping by using Google Earth Elevation Data and Comparing the Precision with Topographic Maps**  
Şekerci A., Gülgen F.  
28th International Cartographic Conference, Washington, Kiribati, 2 - 07 July 2017
- XXIX. **Generalizing and Labelling Street Features in Multi-Resolution Maps: Street Networks Generalizing and Labelling**  
Shoman W., Gülgen F.  
20th AGILE Conference on Geographic Information Science, Utrecht, Netherlands, 9 - 12 May 2017
- XXX. **Address Standardization for Geocoding**  
Kılıç B., Gülgen F.  
TMMOB Harita ve Kadastro Mühendisleri Odası, 16. Türkiye Harita Bilimsel ve Teknik Kurultayı, Ankara, Turkey, 03 May 2017, pp.1-4
- XXXI. **A Model Proposal on Standardization of Address Data for Geocoding**  
Kılıç B., Gülgen F.  
Dünya CBS Günü 2016, İstanbul, Turkey, 24 November 2016, pp.54
- XXXII. **Proposal of a Model for Tracking the Amount and the Yield of Agricultural Product using GIS**  
Kılıç B., Yılmaz Y., GÜLGEN F., GÜLGEN F.  
4th International Geography Symposium, May 23-26, 2016, Kemer - Antalya, Turkey, Antalya, Turkey, 16 May 2016, pp.87
- XXXIII. **CENTRALITY BASED HIERARCHY FOR GENERALIZING AND LABELLING STREET FEATURES IN MULTI RESOLUTION MAPS**  
Shoman W., Gülgen F.  
6th International Conference on Cartography and GIS, Albena, Bulgaria, 13 - 17 June 2016, pp.361-366
- XXXIV. **A Research in Cartographic Labeling to Predict the Suitable Amount of Labeling in Multi Resolution Maps**  
Shoman W., Gülgen F.  
1st ICA European Symposium on Cartography (EuroCarto), Vienna, Austria, 10 - 12 November 2015
- XXXV. **Creating a National Park Geographic Information System A Case Study for the Mount Ida**  
Gülgen F., Başaraner A. M., Yücel M. A., Çetinkaya S.  
5th International Conference on Cartography and GIS, Albena, Bulgaria, 15 - 21 June 2014
- XXXVI. **An Approach to Create Road Network Hierarchy Based on the Attribute Integration using Fuzzy-AHP**  
Gülgen F.

TMMOB Coğrafi Bilgi Sistemleri Kongresi, Ankara, Turkey, 10 - 16 November 2013

**XXXVII. Block-Based Selection and Elimination Method for Road Networks**

Gülgen F., Gökgöz T.

TMMOB Coğrafi Bilgi Sistemleri Kongresi, Antalya, Turkey, 31 October - 04 November 2011

**XXXVIII. A New Selection and Elimination Approach for Urban Road Network Generalization**

Gülgen F., Gökgöz T.

Genelleştirme ve Çoklu Gösterim Çalıştayı, Bursa, Turkey, 13 - 19 September 2009, pp.44-45

**XXXIX. Selection of Roads for Cartographic Generalization**

Gülgen F., Gökgöz T.

INTERNATIONAL ARCHIVES OF PHOTOGRAMMETRY REMOTE SENSING AND SPATIAL INFORMATION SCIENCES, Beijing, China, 3 - 11 July 2008, vol.37, pp.615-620

**XL. GIS and Cartography for Mountain Activities and Natural Resources**

Selçuk M., Başaraner A. M., Uluğtekin N. N., Gökgöz T., Gülgen F., Yücel M. A., Çetinkaya S., Doğru A. Ö., Bilgi S., Ucar D.

Second International Conference on Cartography and GIS, Sofija, Bulgaria, 21 - 24 January 2008, pp.293-300

**XLII. Cartographic Generalization and Agent Technology for Road Data**

Gülgen F., Gökgöz T.

2nd International Conference on Cartography and GIS, Sofija, Bulgaria, 21 - 24 January 2008, pp.307-314

**XLIII. Geographical Information System for Mountaineering Activities and Thematic Map Production**

Selçuk M., Başaraner A. M., Uluğtekin N. N., Gökgöz T., Gülgen F., Yücel M. A., Doğru A. Ö., Bilgi S., Çetinkaya S., Doğan U.

TMMOB Coğrafi Bilgi Sistemleri Kongresi, Trabzon, Turkey, 30 October - 02 November 2007, pp.742-747

**XLIV. Cartographic Generalization Application for Road Data in Multi-Agent System**

Gülgen F., Gökgöz T.

TMMOB Coğrafi Bilgi Sistemleri Kongresi, Trabzon, Turkey, 30 October - 02 November 2007, pp.795-807

**XLV. Effects of Watershed Delineation from Grid DEMs in GIS to Non-Point Source Water Pollution Modelling**

Gökgöz T., Başaraner A. M., Yücel M. A., Gülgen F., Doğru A. Ö., Uluğtekin N. N., Çıgızoğlu H. K.

14th Symposium on Environmental Pollution and Its Impact on Life in the Mediterranean and Health, Sevilla, Spain, 10 - 14 October 2007, pp.141

**XLVI. Comparison of Drainage Networks Extracted from DEMs Automatically Using Accumulation Values and PPA**

Gülgen F., Gökgöz T.

23rd International Cartographic Conference, Moscow, Russia, 4 - 10 August 2007

**XLVII. Watershed Delineation from Grid DEMs in GIS: Effects of Drainage Lines and Resolution**

Gökgöz T., Uluğtekin N. N., Başaraner A. M., Gülgen F., Doğru A. Ö., Bilgi S., Yücel M. A., Çetinkaya S., Selçuk M., Uçar D.

10th International Conference on Diffuse Pollution and Sustainable Watershed Management, International Water Association, DipCon 2006, İstanbul, Turkey, 18 - 22 September 2006

**XLVIII. Derivation of Terrain Characteristic Lines from Topographic Data Sets in Cartography and GIS Applications**

Gülgen F.

3. Coğrafi Bilgi Sistemleri Bilişim Günleri, İstanbul, Turkey, 10 - 16 October 2004, pp.249-255

**XLIX. Automatic Extraction of Terrain Skeleton Lines From Digital Elevation Models**

Gülgen F., Gökgöz T.

ISPRS XXth Congress, İstanbul, Turkey, 12 - 23 July 2004, vol.35, pp.372-377

**XLX. Comparison of Two Methods for Deriving Skeleton Lines of Terrain**

Gökgöz T., Gülgen F.

ISPRS XXth Congress, İstanbul, Turkey, 12 - 23 July 2004, vol.35, pp.618-622



## Episodes in the Encyclopedia

### I. Sayısal Kartografya ve Mekansal Bilişim, Türkiye Bilişim Ansiklopedisi

Selçuk M., Ucar D., Uluğtekin N., Bildirici İ. Ö., Gökgöz T., Başaraner A. M., Yücel M. A., Gülgen F., Bilgi S., Doğru A. Ö. Papatya Yayıncılık, pp.689-694, 2006

## Supported Projects

- OKTAY D., YEŞİLYURT İ., UYSAL M., YÜZER N., GÜLGEN F., CANPOLAT O., ACAR U., SARI ERKAN H., ÖZDOĞRU E., ÖZEN Ö. C., et al, Project Supported by Higher Education Institutions, Müsilajdan Elde Edilecek Bakteriler ile Kendi Kendini Onaran Nano Kil Katkılı Geopolimer Malzemelerin 3B Baskı Yöntemi ile Üretilebilirliğinin Araştırılması, 2024 - Continues
- Ertaş B., Turgut S., Taşkıran M., Arabul A. Y., Keskin Arabul F., Gülgen F., Project Supported by Higher Education Institutions, DETERMINING THE EFFECTS OF FEBRUARY 2023 KAHRAMANMARAŞ (PAZARCIK AND ELBİSTAN) AND HATAY EARTHQUAKES AND CREATING AN ARTIFICIAL INTELLIGENCE-BASED MODEL FOR POST-DISASTROI MANAGEMENT HATAY PROVINCE EXAMPLE, 2023 - 2024
- Edalı M., Aydın N., Özkaya B., Hacı M., Özgül M. D., Demir Ö., Saraçoğlu A., Bakırman T., Alp S., Şeker Ş., et al, Ministry of Transport, Sürdürülebilir ve Akıllı Hareketlilik Stratejisi ve Eylem Planının Oluşturulması, 2021 - 2023
- Gülgen F., Çelen M., TUBITAK Project, Developing Solution Suggestions by Researching the Basic Nutrient Sources Triggering the Formation of Marine Mucilage in Two Different Basin Characteristics, 2021 - 2022
- Gülgen F., Sofu A. M., Project Supported by Other Official Institutions, NATIONAL LAND COVER/USE CLASSIFICATION AND MONITORING SYSTEM (UASIS) FEASIBILITY PROJECT, 2021 - 2022
- Gülgen F., Çelen M., Öncel M. S., Balık Şanlı F., Karpuzcu M., Engin G., TUBITAK Project, Investigation of Hydromorphological Modification Levels in Water Resources by Using Geographical Information Science and Technology and Development of a Decision Support Tool: Çayırova-Saz Stream, 2019 - 2022
- Tuzkaya U. R., Gülgen F., Kılıç B., Project Supported by Other Official Institutions, Istanbul Logistic Master Plan, 2015 - 2019
- Elalmış V., Gülgen F., TUBITAK Project, Determination of Bicycle Parking Areas and Capacity Requirements for Yıldız Technical University Davutpaşa Campus, 2018 - 2018
- GÜLGEN F., Project Supported by Higher Education Institutions, Çok çözünürlüklü Yol Ağı Haritalarının Genelleştirilmesi ve Etiketlenmesi, 2015 - 2017
- Gülgen F., Gökgöz T., Project Supported by Other Official Institutions, My Project Istanbul: A New Selection/Elimination Approach for the Generalization of Urban Road Networks, 2008 - 2009
- Gökgöz T., Başaraner A. M., Gülgen F., Project Supported by Higher Education Institutions, Automatic Generalization of Hydrographic Objects in Topographic Databases and Maps Based on Object-Oriented and Multi-Agent Approach, 2005 - 2008
- Selçuk M., Uluğtekin N. N., Uçar D., Gökgöz T., Başaraner A. M., Yücel M. A., Gülgen F., Bilgi S., Doğru A. Ö., Çetinkaya S., Project Supported by Higher Education Institutions, Developing a Geographical Information System for Mountain Activities and Making Thematic Maps, 2005 - 2007

## Memberships / Tasks in Scientific Organizations

Harita Kadastro Tapu Müzesi Derneği, Board Member, 2018 - Continues

Harita Kadastro Tapu Müzesi Derneği, Member, 2015 - Continues

Mekansal Bilişim İnisyatifi, Member, 2008 - Continues

TMMOB - Harita Kadastro Müh. Odası - 24. Dönem Mekansal Bilişim ve CBS Komisyonu ( İSTANBUL), Member, 2016 - 2018

TMMOB - Harita Kadastro Müh. Odası - 6. Dönem Kartografya ve Mekansal Bilişim Komisyonu, Member, 2014 - 2017

TMMOB - Harita Kadastro Müh. Odası - 23. Dönem Mekansal Bilişim ve CBS Komisyonu ( İSTANBUL), Member, 2014 - 2016

TMMOB - Harita Kadastro Müh. Odası - 22. Dönem Mekansal Bilişim ve CBS Komisyonu ( İSTANBUL), Member, 2012 - 2014  
TMMOB - Harita Kadastro Müh. Odası - 5. Dönem Kartografya ve Mekansal Bilişim Komisyonu, Member, 2010 - 2014  
TMMOB - Harita Kadastro Müh. Odası - 4. Dönem Kartografya ve Mekansal Bilişim Komisyonu, Member, 2007 - 2010

## **Scientific Refereeing**

Geocarto International, SCI Journal, May 2018  
Geomatik, National Scientific Refreed Journal, January 2018  
International Journal of Engineering and Geosciences, Other Indexed Journal, January 2018  
Geomatik, National Scientific Refreed Journal, December 2017  
Geocarto International, SCI Journal, May 2017  
TUBITAK Project, January 2017  
TUBITAK Project, January 2017  
TUBITAK Project, December 2016  
Harita Teknolojileri Elektronik Dergisi, National Scientific Refreed Journal, July 2016  
IET Generation, Transmission & Distribution, SCI Journal, June 2016  
Geocarto International, SCI Journal, April 2016  
IET Generation, Transmission & Distribution, SCI Journal, March 2016  
IET Generation, Transmission & Distribution, SCI Journal, December 2015  
International Journal of Digital Earth, SCI Journal, August 2013  
TMMOB Coğrafi Bilgi Sistemleri Kongresi 2013, National Scientific Refreed Journal, July 2013  
International Journal of Geographical Information Science, SCI Journal, March 2012  
International Journal of Geographical Information Science, SCI Journal, November 2011

## **Scientific Consultations**

Yıldız Teknoloji Transfer Ofisi A.Ş, Scientific Consultancy, Yıldız Technical University, Faculty Of Civil Engineering, Geomatic Engineering, Turkey, 2018 - 2018  
Yıldız Teknoloji Transfer Ofisi A.Ş, Scientific Consultancy, Yıldız Technical University, Faculty Of Civil Engineering, Geomatic Engineering, Turkey, 2017 - 2018  
Yıldız Teknoloji Transfer Ofisi A.Ş, Scientific Consultancy, Yıldız Technical University, Faculty Of Civil Engineering, Geomatic Engineering, Turkey, 2016 - 2017  
Yıldız Teknoloji Transfer Ofisi A.Ş, Scientific Consultancy, Yıldız Technical University, Faculty Of Civil Engineering, Geomatic Engineering, Turkey, 2015 - 2016  
WYG Türkiye Firması, Scientific Consultancy, Yıldız Technical University, Faculty Of Civil Engineering, Geomatic Engineering, Turkey, 2012 - 2012

## **Metrics**

Publication: 88  
Citation (WoS): 149  
Citation (Scopus): 158  
H-Index (WoS): 8  
H-Index (Scopus): 8

## **Congress and Symposium Activities**

7th International Conference on Cartography & GIS, Attendee, Burgas, Bulgaria, 2018

INTERNATIONAL SYMPOSIUM ON GIS APPLICATIONS IN GEOGRAPHY & GEOSCIENCES, Session Moderator, Çanakkale, Turkey, 2017

INTERNATIONAL SYMPOSIUM ON GIS APPLICATIONS IN GEOGRAPHY & GEOSCIENCES, Attendee, Çanakkale, Turkey, 2017

### **Invited Talks**

Harita Mühendisliği Eğitim-Öğretimi'nin 70. Yılı, Seminar, Yıldız Teknik Üniversitesi, Turkey, October 2019

### **Non Academic Experience**

Business Establishment Private

HİMTAŞ AŞ.