

## Asst. Prof. Zehra ÇETİN

### Personal Information

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### International Researcher IDs

ORCID: 0000-0003-0518-5780

Publons / Web Of Science ResearcherID: AAC-9870-2021

ScopusID: 57214289121

Yoksis Researcher ID: 37203

### Education Information

Doctorate, Yıldız Technical University, Graduate School Of Natural And Applied Sciences, Harita Mühendisliği Anabilim Dalı, Turkey 2015 - 2022

Postgraduate, Yıldız Technical University, Fen Bilimleri Enstitüsü, Harita Mühendisliği Anabilim Dalı, Turkey 2012 - 2015

Undergraduate, Yıldız Technical University, Faculty Of Civil Engineering, Harita Mühendisliği Bölümü, Turkey 2008 - 2012

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Investigation of Tree Species Classification Possibilities From Laser Data Using Machine Learning Algorithms, Yıldız Technical University, Graduate School Of Natural And Applied Sciences, Harita Mühendisliği Anabilim Dalı / Uzaktan Algılama ve CBS, 2022

Postgraduate, Nokta Tabanlı Sınıflandırma Yöntemleri ile LiDAR Verilerinin Sınıflandırılması, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, Harita Mühendisliği Anabilim Dalı / Uzaktan Algılama Ve Cbs, 2015

### Research Areas

3D-Modeling, Geotechnical Engineering, Geographic Information Systems, Photogrammetry, Overhead Photogrammetry, Geodesy and Photogrammetry, Remote sensing, Image Processing, Laser scanning, Lidar, Laser Scanning, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Yıldız Technical University, Faculty Of Civil Engineering, Geomatic Engineering, 2023 - Continues  
Research Assistant PhD, Yıldız Technical University, Faculty Of Civil Engineering, Geomatic Engineering, 2022 - 2023  
Research Assistant, Yıldız Technical University, Faculty Of Civil Engineering, Geomatic Engineering, 2013 - 2022

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

- I. **Contribution of Colour Information to the Classification of 3D Points from Aerial Images**  
Yastıklı N., Çetin Z.  
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.48, pp.1-12, 2023 (SCI-Expanded)
- II. **The Use of Machine Learning Algorithms in Urban Tree Species Classification**  
ÇETİN Z., YASTIKLI N.  
ISPRS INTERNATIONAL JOURNAL OF GEO-INFORMATION, vol.11, no.4, 2022 (SCI-Expanded)
- III. **Classification of raw LiDAR point cloud using point-based methods with spatial features for 3D building reconstruction**  
YASTIKLI N., Cetin Z.  
ARABIAN JOURNAL OF GEOSCIENCES, vol.14, no.3, 2021 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Automatic detection of single street trees from airborne LiDAR data based on point segmentation methods**  
Çetin Z., Yastıklı N.  
INTERNATIONAL JOURNAL OF ENGINEERING AND GEOSCIENCES, vol.8, no.2, pp.129-137, 2023 (ESCI)
- II. **The production of line-drawing and 3D modeling of historical Mehmet Ali Bey Fountain with SFM approach**  
Yastıklı N., Çetin Z., Asamaka E.  
Cultural Heritage and Science, vol.3, no.1, pp.19-24, 2022 (Peer-Reviewed Journal)
- III. **Sayısal Yersel Fotogrametri Yöntemi ile Sarıyer İstanbul'da Siluet Üretimi**  
YASTIKLI N., ÇETİN Z., ARSLAN E.  
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.17, pp.53-57, 2017 (Peer-Reviewed Journal)
- IV. **The Use of the Terrestrial Photogrammetry in Reverse Engineering Applications**  
YASTIKLI N., ÇETİN Z., Altıntaş P., Çak T.  
International Journal of 3-D Information Modeling, vol.4, pp.48-57, 2015 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **The Use of the Terrestrial Photogrammetry in Reverse Engineering Applications**  
YASTIKLI N., ÇETİN Z., ALTINTAŞ P., ÇAK T.  
in: 3D Printing: Breakthroughs in Research and Practice, Information Resources Management Association , Editor, Igi Global Publications, Hersley Pa, pp.241-250, 2017

## Refereed Congress / Symposium Publications in Proceedings

- I. **Detection of Urban Trees from LiDAR Data**  
Çetin Z., Yastıklı N.  
XII. Türkiye Ulusal Fotogrametri ve Uzaktan Algılama Birliği (TUFUAB) Teknik Sempozyumu, Sivas, Turkey, 24 - 26 May 2023, pp.45
- II. **The Production of Line-Drawing and 3D Modeling of Historical Mehmet Ali Bey Fountain with SFM Approach**  
Yastıklı N., Çetin Z., Asamaka E.  
11. Türkiye Ulusal Fotogrametri ve Uzaktan Algılama Birliği Teknik Sempozyumu (TUFUAB-2022), Mersin, Turkey, 12 - 14 May 2022, pp.97

- III. **AUTOMATIC DETECTION OF SINGLE STREET TREES FROM AIRBORNE LiDAR DATA BASED ON POINT SEGMENTATION METHODS**  
Çetin Z., Yastıklı N.  
International Symposium on Applied Geoinformatics (ISAG 2021), Riga, Latvia, 2 - 03 December 2021, pp.1-5
- IV. **Detection of Individual Trees in Urban Areas Using the Point Cloud Produced by Dense Image Matching Algorithms**  
Yastıklı N., Çetin Z.  
FIG Working Week 2020, Amsterdam, Netherlands, 10 - 14 May 2020
- V. **DETECTION OF INDIVIDUAL TREES IN URBAN AREAS USING RAW LiDAR DATA**  
Yastıklı N., Çetin Z.  
International Symposium on Applied Geoinformatics ISAG2019 , İstanbul, Turkey, 7 - 09 November 2019, pp.1
- VI. **YOĞUN GÖRÜNTÜ EŞLEME ALGORİTMALARI İLE ÜRETİLEN NOKTA BULUTUNUN SINIFLANDIRILMASI**  
YASTIKLI N., ÇETİN Z.  
X. Türkiye Ulusal Fotogrametri ve Uzaktan Algılama Birliği Teknik Sempozyumu (TUFUAB 2019), Aksaray, Turkey, 25 April 2019, pp.119-126
- VII. **AUTOMATIC 3D BUILDING MODEL GENERATIONS with AIRBORNE LiDAR DATA**  
YASTIKLI N., ÇETİN Z.  
4th International GeoAdvances Workshop - GeoAdvances 2017: ISPRS Workshop on Multi-Dimensional and Multi-Scale Spatial Data Modeling, Safranbolu, Karabuk, Turkey, 14 - 15 October 2017, vol.4, pp.411-414
- VIII. **Fotogrametrik Harita ve LiDAR Verileri ile 3B Kent Modeli Üretimi**  
YASTIKLI N., ÇETİN Z., Üçok U., Koçdemir K. H.  
16. Türkiye Harita Bilimsel ve Teknik Kurultayı, Ankara, Turkey, 03 May 2017, pp.1
- IX. **Sayısal Yersel Fotogrametri Yöntemi ile Sarıyer İstanbul'da Siluet Üretimi**  
YASTIKLI N., ÇETİN Z., Arslan E.  
TUFUAB IX. Teknik Sempozyumu, Adana, Turkey, 27 April 2017, pp.193-197
- X. **Hava LiDAR Verileri ile 3B Bina Modellerinin Otomatik Üretimi**  
YASTIKLI N., ÇETİN Z.  
6. Uzaktan Algılama ve CBS Sempozyumu (UZAL-CBS 2016), Adana, Turkey, 05 October 2016, pp.152-159
- XI. **CLASSIFICATION OF LiDAR DATA WITH POINT BASED CLASSIFICATION METHODS**  
YASTIKLI N., ÇETİN Z.  
XXIII ISPRS Congress, Prague, Czech Republic, 12 - 19 July 2016, vol.3, pp.441-445
- XII. **YERSEL FOTOGRAMETRİNİN TERSİNE MÜHENDİSLİK UYGULAMALARINDA KULLANIMI**  
YASTIKLI N., ÇETİN Z., ALTINTAŞ P., ÇAK T.  
5. UZAKTAN ALGILAMA-CBS SEMPOZYUMU (UZAL-CBS 2014), İstanbul, Turkey, 14 - 17 October 2014
- XIII. **PERFORMANCE VALIDATION OF HIGH RESOLUTION DIGITAL SURFACE MODELS GENERATED BY DENSE IMAGE MATCHING WITH THE AERIAL IMAGES**  
YASTIKLI N., BAYRAKTAR H., Erisir Z.  
ISPRS Technical Commission I Symposium, Colorado, United States Of America, 17 - 20 November 2014, pp.429-433

## Supported Projects

YASTIKLI N., ÇETİN Z., Project Supported by Higher Education Institutions, LiDAR Verileri Kullanılarak Ağaç Türlerinin Makine Öğrenmesi ile Otomatik Tespitinde Parametrelerin Analizi ve Optimum Sınıflandırma Özelliklerinin Belirlenmesi, 2023 - 2023

## Scientific Research / Working Group Memberships

TMMOB Harita ve Kadastro Mühendisleri Odası, TMMOB Harita ve Kadastro Mühendisleri Odası, Türkiye,

<http://www.hkmo.org.tr/>, 2012 - Continues

## **Metrics**

Publication: 21

Citation (WoS): 33

Citation (Scopus): 52

H-Index (WoS): 3

H-Index (Scopus): 4

## **Congress and Symposium Activities**

INTERNATIONAL SYMPOSIUM ON APPLIED GEOINFORMATICS (ISAG2021), Attendee, Riga, Latvia, 2021

INTERNATIONAL SYMPOSIUM ON APPLIED GEOINFORMATICS (ISAG-2019), Working Group, İstanbul, Turkey, 2019

X. Türkiye Ulusal Fotogrametri ve Uzaktan Algılama Birliği Teknik Sempozyumu (TUFUAB 2019), Attendee, Aksaray, Turkey, 2019

5. Uzaktan Algılama ve CBS Sempozyumu (UZAL-CBS 2014), Working Group, İstanbul, Turkey, 2014

## **Awards**

ÇETİN Z., Yıldız Teknik Üniversitesi Harita Mühendisliği Bölümü 2011-2012 Öğretim Yılı Bölüm Birinciliği, Yıldız Teknik Üniversitesi, June 2012

## **Non Academic Experience**

Nebula Mühendislik İnşaat Harita San. ve Dış Tic. Ltd. Şti.