

## Prof. NİYAZİ ARSLAN

### Personal Information

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**Address:** Çukurova Üniversitesi, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, Balcalı, 01330, Sarıçam/ADANA

### International Researcher IDs

ORCID: 0000-0001-5406-6361

Publons / Web Of Science ResearcherID: G-5017-2018

Yoksis Researcher ID: 119540

### Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Jeodezi Ve Fotogrametri Mühendisliği Bölümü, Turkey 1999 - 2004

Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Jeodezi Ve Fotogrametri Mühendisliği Bölümü, Turkey 1995 - 1997

Undergraduate, Yildiz Technical University, Faculty Of Civil Engineering, Geomatic Engineering, Turkey 1991 - 1995

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, GPS ile İyonosfer Toplam Elektron Yoğunluğu Değişimlerinin Koordinatlara Etkilerinin Araştırılması, Yildiz Technical University, Fen Bilimleri Enstitüsü, Jeodezi Ve Fotogrametri Mühendisliği Bölümü, 2004

Postgraduate, GPS ve Atmosferik Modeller, Yildiz Technical University, Fen Bilimleri Enstitüsü, Jeodezi Ve Fotogrametri Mühendisliği Bölümü, 1997

### Research Areas

Geotechnical Engineering, Engineering and Technology

### Academic Titles / Tasks

Professor, Cukurova University, Mühendislik Fakültesi, Maden Mühendisliği, 2021 - Continues

Professor, Cukurova University, Ceyhan Mühendislik Fakültesi, Harita Mühendisliği, 2019 - 2021

Associate Professor, Cukurova University, Ceyhan Mühendislik Fakültesi, Harita Mühendisliği, 2013 - 2019

Associate Professor, Yildiz Technical University, Faculty Of Civil Engineering, Geomatic Engineering, 2012 - 2013

Assistant Professor, Yildiz Technical University, Faculty Of Civil Engineering, Geomatic Engineering, 2008 - 2012  
Research Assistant, Yildiz Technical University, Faculty Of Civil Engineering, Geomatic Engineering, 1999 - 2008

## Academic and Administrative Experience

Head of Department, Cukurova University, Ceyhan Mühendislik Fakültesi, Harita Mühendisliği, 2014 - 2021  
Vice Dean, Cukurova University, Ceyhan Mühendislik Fakültesi, 2014 - 2014

## Courses

Mathematical geodesy, Undergraduate, 2020 - 2021  
Physical geodesy, Undergraduate, 2021 - 2022  
Adjustment computation, Undergraduate, 2021 - 2022  
Topography, Undergraduate, 2020 - 2021  
Parameter estimation and error theory, Undergraduate, 2020 - 2021  
Jeodezi II, Undergraduate, 2016 - 2017  
Dengeleme hesabı II, Undergraduate, 2016 - 2017  
Jeodezi I, Undergraduate, 2016 - 2017  
Dengeleme Hesabı I, Undergraduate, 2016 - 2017  
Uzaktan Algılama ve Coğrafi Bilgi Sistemlerinde Kullanılan Temel Haritacılık Kavramları, Postgraduate, 2016 - 2017  
Topoğrafya, Undergraduate, 2015 - 2016  
Temel Bilgi Teknolojileri, Undergraduate, 2014 - 2015  
İstatistik, Undergraduate, 2012 - 2013  
Mühendislik Etiği, Undergraduate, 2012 - 2013  
Sayısal Analiz, Undergraduate, 2012 - 2013  
Jeodezi, Undergraduate, 2012 - 2013  
Hata Kuramı ve Parametre Kestirimi, Undergraduate, 2012 - 2013  
Uydu Jeodezisi, Undergraduate, 2012 - 2013  
Jeodezi Uygulaması, Undergraduate, 2011 - 2012  
Mesleki İngilizce, Undergraduate, 2011 - 2012  
Küresel Trigonometri, Undergraduate, 2011 - 2012  
Temel Bilgisayar Bilimleri, Undergraduate, 2011 - 2012

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

- I. **Application of long short-term memory (LSTM) neural network based on deep learning for electricity energy consumption forecasting**  
BİLGİLİ M., ARSLAN N., ŞEKERTEKİN A., YAŞAR A.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.30, no.1, pp.140-157, 2022  
(SCI-Expanded)
- II. **Short-term air temperature prediction by adaptive neuro-fuzzy inference system (ANFIS) and long short-term memory (LSTM) network**  
Şekertekin A., Bilgili M., Arslan N., Yildirim A., Çelebi K., Özbek A.  
METEOROLOGY AND ATMOSPHERIC PHYSICS, vol.133, pp.943-959, 2021 (SCI-Expanded)
- III. **Prediction of 10-min, hourly, and daily atmospheric air temperature: comparison of LSTM, ANFIS-FCM, and ARMA**  
Ozbek A., Sekertekin A., Bilgili M., Arslan N.  
Arabian Journal Of Geosciences, vol.14, no.7, pp.1-16, 2021 (SCI-Expanded)

- IV. **Modeling Diurnal Land Surface Temperature on a Local Scale of an Arid Environment Using Artificial Neural Network (ANN) and Time Series of Landsat-8 Derived Spectral Indexes**  
Şekertekin A., Arslan N., Bilgili M.  
Journal of Atmospheric and Solar-Terrestrial Physics, vol.206, 2020 (SCI-Expanded)
- V. **A SWOT Analysis for Offshore Wind Energy Assessment Using Remote-Sensing Potential**  
Nezhad M. M., Shaik R. U., Heydari A., Razmjoo A., ARSLAN N., Garcia D. A.  
APPLIED SCIENCES-BASEL, vol.10, no.18, 2020 (SCI-Expanded)
- VI. **Application of Long Short-Term Memory neural network model for the reconstruction of MODIS Land Surface Temperature images**  
ARSLAN N., ŞEKERTEKİN A.  
JOURNAL OF ATMOSPHERIC AND SOLAR-TERRESTRIAL PHYSICS, vol.194, 2019 (SCI-Expanded)
- VII. **Application of spectral analysis to determine geothermal anomalies in the Tuzla region, NW Turkey**  
ERENOĞLU R. C., ARSLAN N., ERENOĞLU O., Arslan E.  
ARABIAN JOURNAL OF GEOSCIENCES, vol.12, no.14, 2019 (SCI-Expanded)
- VIII. **Monitoring thermal anomaly and radiative heat flux using thermal infrared satellite imagery - A case study at Tuzla geothermal region**  
ŞEKERTEKİN A., ARSLAN N.  
GEOTHERMICS, vol.78, pp.243-254, 2019 (SCI-Expanded)
- IX. **Accuracy Assessment of Low Cost UAV Based City Modelling for Urban Planning**  
ERENOĞLU R. C., ERENOĞLU O., ARSLAN N.  
TEHNICKI VJESNIK-TECHNICAL GAZETTE, vol.25, no.6, pp.1708-1714, 2018 (SCI-Expanded)
- X. **Assessment of oil spills using Sentinel 1 C-band SAR and Landsat 8 multispectral sensors**  
ARSLAN N.  
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.190, no.11, 2018 (SCI-Expanded)
- XI. **Identification of hotspots using different statistical methods in a region of manufacturing plants**  
ARSLAN N.  
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.190, no.9, 2018 (SCI-Expanded)
- XII. **Network RTK: A case study in Florida**  
BERBER M., Arslan N.  
MEASUREMENT, vol.46, no.8, pp.2798-2806, 2013 (SCI-Expanded)
- XIII. **Correlation analysis of vertical total electron content**  
Arslan N.  
ACTA GEOPHYSICA, vol.59, no.2, pp.377-397, 2011 (SCI-Expanded)
- XIV. **Monitoring of the ionosphere TEC variations during the 17th August 1999 Izmit earthquake using GPS data**  
DOĞAN U., ERGINTAV S., Skone S., ARSLAN N., Oz D.  
EARTH PLANETS AND SPACE, vol.63, no.12, pp.1183-1192, 2011 (SCI-Expanded)
- XV. **REAL-TIME KINEMATIC GPS FOR CADASTRAL SURVEYING**  
PIRTI A., ARSLAN N., Deveci B., AYDIN Ö., ERKAYA H., HOŞBAŞ R. G.  
SURVEY REVIEW, vol.41, no.314, pp.339-351, 2009 (SCI-Expanded)
- XVI. **Network Calibration for Unfavorable Reference-Rover Geometry in Network-Based RTK: Ohio CORS Case Study**  
Grejner-Brzezinska D. A., Arslan N., WIELGOSZ P., Hong C.  
JOURNAL OF SURVEYING ENGINEERING, vol.135, no.3, pp.90-100, 2009 (SCI-Expanded)
- XVII. **Identification of vertical total electron content by time series analysis**  
Erdogan H., Arslan N.  
DIGITAL SIGNAL PROCESSING, vol.19, no.4, pp.740-749, 2009 (SCI-Expanded)
- XVIII. **Effect of stochastic ionospheric delay modeling for GPS ambiguity resolution**  
HONG C., Grejner-Brzezinska D. A., KWON J. H., Arslan N.  
EARTH PLANETS AND SPACE, vol.61, no.8, 2009 (SCI-Expanded)
- XIX. **The impact of temporal ionospheric gradients in Northern Europe on relative GPS positioning**

ARSLAN N., DEMİREL H. H.

JOURNAL OF ATMOSPHERIC AND SOLAR-TERRESTRIAL PHYSICS, vol.70, pp.1382-1400, 2008 (SCI-Expanded)

XX. **An experiment of predicting Total Electron Content (TEC) by fuzzy inference systems**

Akyılmaz O., ARSLAN N.

EARTH PLANETS AND SPACE, vol.60, no.9, pp.967-972, 2008 (SCI-Expanded)

## Articles Published in Other Journals

I. **Atmospheric Effects on RTK Network in Florida**

BERBER M., ARSLAN N.

BOLETIM DE CIENCIAS GEODESICAS, vol.21, no.4, pp.814-831, 2015 (Scopus)

II. **İyonosferdeki Toplam Elektron Yoğunluğu Büyük Depremlerin Kestiriminde Kullanılabilir mi**

ARSLAN N., AYDIN C., Demirel H.

YTÜ Dergisi, vol.1, pp.47-56, 2003 (Peer-Reviewed Journal)

## Books & Book Chapters

I. **Network calibration for unfavorable reference-rover geometry in network-based RTK: Ohio CORS case study**

Grejner-Brzezinska D., ARSLAN N., Wielgosz P., Chang-Ki H.

in: CORS and OPUS for Engineers, Tools for Surveying and Mapping Applications (monograph), Tomas Soler, Editor, American Society Of Civil Engineers-Asce, Virginia, pp.143-153, 2011

## Refereed Congress / Symposium Publications in Proceedings

I. **Use of Thermal Infrared Remote Sensing in Geothermal Exploration**

ŞEKERTEKİN A., ARSLAN N.

Second International Congress on Geographical Education (ICGE/UCEK-2019), Eskişehir, Turkey, 3 - 05 October 2019, pp.358-0

II. **Gemstone exploration using remote sensing method a case study of Yenice Opal, Çanakkale, NW Turkey**

ÇALIK A., ARSLAN N., ERENOĞLU R. C., ERENOĞLU O., ULUGERGERLİ E. U.

72. Türkiye Jeoloji Kurultayı (Uluslararası Katılımlı), 28 January - 01 February 2019

III. **Discovering the Changes in Land Surface Temperature Caused by the Conversion of Agricultural Lands to Residential and Urban Use**

ŞEKERTEKİN A., ARSLAN N.

9th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 11 - 14 June 2019, pp.393-398

IV. **Imaging of Spectral Properties of Dendritic Agate from Dereyalak Village (Eskişehir) – NW of Turkey using Sensor Data**

ERENOĞLU O., ÇALIK A., ERENOĞLU R. C., ULUGERGERLİ E. U., ARSLAN N.

International Symposium on Modern Technologies, Education and Professional Practice in Geodesy and Related Fields, 8 - 09 November 2018

V. **Comparison of Pixel and Object-Based Classification Methods in Wetlands Using Sentinel-2 Data**

ÇİÇEKLİ S. Y., ŞEKERTEKİN A., ARSLAN N., DÖNMEZ C.

3rd International Mediterranean Science and Engineering Congress (IMSEC 2018), Adana, Turkey, 24 - 26 October 2018, pp.298-302

VI. **Comparison of Pixel and Object-Based Classification Methods in Wetlands Using Sentinel-2 Data**

ÇİÇEKLİ S. Y., ŞEKERTEKİN A., ARSLAN N., DÖNMEZ C.

3rd International Mediterranean Science and Engineering Congress (IMSEC 2018), Adana, Turkey, 24 - 26 October 2018, pp.298-302

**VII. Comparison of Pixel and Object-Based Classification Methods in Wetlands Using Sentinel-2 Data**

ÇİÇEKLİ S. Y., ŞEKERTEKİN A., ARSLAN N., DÖNMEZ C.

3rd International Mediterranean Science and Engineering Congress (IMSEC 2018), Adana, Turkey, 24 - 26 October 2018, pp.298-302

**VIII. Index-Based Identification of Surface Water Resources Using Sentinel-2 Satellite Imagery**

ŞEKERTEKİN A., ÇİÇEKLİ S. Y., ARSLAN N.

2nd International Symposium on Multidisciplinary Studies and Innovative Technologies, Ankara, Turkey, 19 - 21 October 2018

**IX. GECE VE GÜNDÜZ YER YÜZEY SICAKLIĞI GÖRÜNTÜLERİ İLE YÜZEY ISI ADASI ANALİZİ**

ŞEKERTEKİN A., ÇİÇEKLİ S. Y., ARSLAN N.

Uzaktan Algılama ve Coğrafi Bilgi Sistemleri Sempozyumu 2018 (UZAL-CBS 2018), Eskişehir, Turkey, 18 - 21 September 2018

**X. ADANA SEYHAN BARAJ GÖLÜ ALANININ MEVSİMSEL DEĞİŞİMİNİN YAPAY SİNİR AĞLARI İLE ANALİZİ**

ARSLAN N., ÇİÇEKLİ S. Y., DÖNMEZ C., ŞEKERTEKİN A.

Uzaktan Algılama ve Coğrafi Bilgi Sistemleri Sempozyumu 2018 (UZAL-CBS 2018), Eskişehir, Turkey, 18 - 21 September 2018

**XI. GECE VE GÜNDÜZ YER YÜZEY SICAKLIĞI GÖRÜNTÜLERİ İLE YÜZEY ISI ADASI ANALİZİ**

ŞEKERTEKİN A., ÇİÇEKLİ S. Y., ARSLAN N.

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**XII. ADANA SEYHAN BARAJ GÖLÜ ALANININ MEVSİMSEL DEĞİŞİMİNİN YAPAY SİNİR AĞLARI İLE ANALİZİ**  
ARSLAN N., ÇİÇEKLİ S. Y., DÖNMEZ C., ŞEKERTEKİN A.

Uzaktan Algılama ve Coğrafi Bilgi Sistemleri Sempozyumu 2018 (UZAL-CBS 2018), Eskişehir, Turkey, 18 - 21 September 2018

**XIII. ADANA SEYHAN BARAJ GÖLÜ ALANININ MEVSİMSEL DEĞİŞİMİNİN YAPAY SİNİR AĞLARI İLE ANALİZİ**  
ARSLAN N., ÇİÇEKLİ S. Y., DÖNMEZ C., ŞEKERTEKİN A.

Uzaktan Algılama ve Coğrafi Bilgi Sistemleri Sempozyumu 2018 (UZAL-CBS 2018), Eskişehir, Turkey, 18 - 21 September 2018

**XIV. Index-Based Identification of Surface Water Resources Using Sentinel-2 Satellite Imagery**

ŞEKERTEKİN A., ÇİÇEKLİ S. Y., ARSLAN N.

2nd International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), Kizilcahamam, Turkey, 19 - 21 October 2018, pp.610-614

**XV. Validation of Bernese-Derived Precise Orbits for GRACE Satellites**

UYGUR S. Ö., AYDIN C., ARSLAN N., AKYILMAZ O.

International Symposium on GIS Applications in Geography Geosciences, Çanakkale, Turkey, 18 - 21 October 2017, pp.235-243

**XVI. Use of Sentinel-1 Data in Oil Spill Surveillance and Modeling**

ARSLAN N., ERENOĞLU R. C.

International Symposium on GIS Applications in Geography Geosciences, Çanakkale, Turkey, 18 - 21 October 2017, pp.233

**XVII. Monitoring Ionospheric Disturbances at Mw 7.8 Nepal Earthquake and Predicting Magnitudes of Earthquakes Using GNSS Measurements**

İNYURT S., MEKİK Ç., YILDIRIM Ö., ARSLAN N.

International Symposium on GIS Applications in Geography Geosciences, Çanakkale, Turkey, 18 - 21 October 2017, pp.18

**XVIII. A Novel Approach to Monitor Geodetic Landslide Deformation using Micro-UAS**

ERENOĞLU R. C., ERENOĞLU O., ARSLAN N.

International Symposium on Modern Technologies, Education and Professional Practice in Geodesy and Related

- Fields, SOFYA, Bulgaria, 9 - 10 November 2017
- XIX. Modeling Regional Geoid using GNSS Observables**  
ERENOĞLU R. C., ERENOĞLU O., ARSLAN N.  
International Symposium on Modern Technologies, Education and Professional Practice in Geodesy and Related Fields, SOFYA, Bulgaria, 9 - 10 November 2017
- XX. Optimization of GNSS Network for Landslide Monitoring**  
ERENOĞLU R. C., ERENOĞLU O., ARSLAN N.  
International Symposium on Modern Technologies, Education and Professional Practice in Geodesy and Related Field, SOFYA, Bulgaria, 9 - 10 November 2017
- XXI. Thermal Anomalies Detection Using Aster Images In Tuzla Hot Springs Region**  
Erenoğlu R. C., Arslan N., Erenoğlu O., Arslan E.  
International Symposium on Modern Technologies, Education And Professional Practice In Geodesy And Related Fields, Sofya, Bulgaria, 9 - 10 November 2017, pp.1-10
- XXII. Imaging of Spectral Properties of Opal Mineral using Sensor Data, Yenice District, North-Western Turkey**  
Çalık A., Erenoğlu R. C., Erenoğlu O., Ulugergerli E., Arslan N.  
International Symposium On GIS Applications In Geography & Geosciences, Çanakkale, Turkey, 18 - 21 October 2017, pp.1
- XXIII. Monitoring of Ionospheric Disturbances at Mw 7.8 Nepal Earthquake Using GNSS Measurements**  
İnyurt S., Mekik Ç., Yıldırım Ö., Arslan N.  
International Symposium On GIS Applications In Geography & Geosciences, Çanakkale, Turkey, 18 - 21 October 2017, pp.1
- XXIV. Monitoring ionospheric disturbances at Mw 7.8 Nepal Earthquake and predicting magtitudes of earthquakes using GNSS measurements**  
İNYURT S., MEKİK Ç., YILDIRIM Ö., ARSLAN N.  
International symposium on GIS applications in geography and geosciences, Çanakkale, Turkey, 18 - 21 October 2017
- XXV. Automatic Outlier Identification of Epoch by Epoch Vertical Total Electron Content Maps**  
ARSLAN N., Erenoğlu C.  
International Symposium on Modern Technologies, Education and Professional Practice in Geodesy and Related Fields, Sofya, Bulgaria, 3 - 04 November 2011
- XXVI. A Comparative study of the effects of severe ionospheric conditions on GPS receivers in the southern polar region**  
HONG C., GREJNER-BRZEZINSKA D. A., ARSLAN N., WILLIS M., HOTHEM L.  
2nd SCAR Open Science Conference, Antarctica in the Earth System, Hobart, Australia, 12 - 14 July 2006
- XXVII. Regional Network Calibration for Unfavorable Reference-User Geometry in Network-Based RTK**  
GREJNER-BRZEZINSKA D., ARSLAN N., WIELGOSZ P., HONG C.  
IEEE/ION PLANS, Coronado, Ca, United States Of America, 25 - 27 April 2006
- XXVIII. The Ionospheric Impact on GPS Performance in Southern Polar Region**  
Hong C. -, GREJNER-BRZEZINSKA D. A., Arslan N., WILLIS M., HOTHEM L.  
19th International Technical Meeting of the Satellite Division of the Institute-of-Navigation, Texas, United States Of America, 26 - 29 September 2006, pp.1418-1426

## Supported Projects

- ŞEKERTEKİN A. İ., ARSLAN E., ARSLAN N., Project Supported by Higher Education Institutions, Tarihi ve Kültürel Mirasın 3 Boyutlu Dökümantasyonunda İnsansız Hava Araçlarının Kullanımı: Ceyhan Kurtkulağı Kervansarayı Örneği, 2020 - 2022
- ŞEKERTEKİN A. İ., ARSLAN N., ÇİÇEKLİ S. Y., Project Supported by Higher Education Institutions, Yüzey Isı Adası Etkisinin Zamansal Analizi: Ceyhan/Adana Örneği, 2018 - 2019

ARSLAN N., ERENOĐLU R. C., Project Supported by Higher Education Institutions, SAR uydu verileriyle denizdeki petrol sızıntılarının belirlenmesi, 2017 - 2018

Arslan N., Other International Funding Programs, Oil Spill Detection Caused by Sea Vessel Incident Using SAR Data in Cesme Bay, 2017 - 2017

ARSLAN N., TUBITAK Project, Yakın Yer Uyduları Yardımıyla Yüksek Çözünürlüklü Gravite Alanı Belirleme ve Bölgesel Kütle Deđişimlerinin İzlenmesi, 2013 - 2016

YAŞAR A., ÖZBEK A., BİLGİLİ M., ARSLAN N., PINAR E., Project Supported by Higher Education Institutions, ÖĐRENCİ LABORATUARLARI ALT YAPI GELİŐTİRME PROJESİ II, 2015 - 2015

ARSLAN N., TUBITAK Project, Gebze-Tuzla Arasındaki Bölgenin Mikrodeformasyon Özellikleri, 2006 - 2008

## Metrics

Publication: 51

Citation (WoS): 125

Citation (Scopus): 174

H-Index (WoS): 8

H-Index (Scopus): 10

## Scholarships

- TÜBİTAK-DFG 2225 Doktora sonrası araştırma burs programı, Dresden Teknik Üniversitesi, TUBITAK, 2008 - 2008
- TÜBİTAK 2219 Doktora sonrası araştırma burs programı, Ohio State Üniversitesi , TUBITAK, 2005 - 2006