

## Asst. Prof. RABİA BOVKIR

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: LRT-9902-2024

ScopusID: 57195232465

Yoksis Researcher ID: 241770

### Education

Post Doctorate, University College Dublin, School of Architecture, Planning and Environmental Policy, Spatial Dynamics Lab, Ireland 2024 - Continues

Doctorate, Gebze Technical University, Fen Bilimleri Enstitüsü, Turkey 2017 - 2023

Postgraduate, Gebze Technical University, Fen Bilimleri Enstitüsü, Turkey 2016 - 2017

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Turkey 2014 - 2016

Undergraduate, Istanbul Technical University, İnşaat, Geomatik Mühendisliği, Turkey 2009 - 2014

### Research Areas

Geomatics Engineering, Engineering and Technology

### Academic Positions

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Geomatik Mühendisliği Bölümü, 2024 - Continues

Research Assistant, Gebze Technical University, Faculty of Engineering, Geomatics Engineering, 2016 - 2024

### Journal articles indexed in SCI, SSCI, and AHCI

- I. **Enhancing the National Spatial Data Infrastructure to Support 3D Real Estate Valuation: A Case Study of GIS-Supported Scoring of 3D Residential Units Based on Expert Opinion**  
AYDINOĞLU A. Ç., BOVKIR R., Sisman S., Kara A.  
TRANSACTIONS IN GIS, no.2, 2025 (SSCI)
- II. **Conceptual modelling of sensor-based geographic data: interoperable approach with real-time air quality index (AQI) dashboard**  
Bovkır R., Aydinoglu A. C.  
EARTH SCIENCE INFORMATICS, vol.1, pp.1-17, 2024 (SCI-Expanded)
- III. **Developing a mobile application with geo-analytic tools to perform real estate valuation within smart cities**  
Aydinoğlu A. Ç., Bovkır R., Çölkesen İ., Seyrek E. C., Bilgin M. S.  
SURVEY REVIEW, pp.1-19, 2024 (SCI-Expanded)

- IV. **Modelling and integrating public-law restrictions on urban areas for future cadastral system of Turkey**  
 Aydinoglu A., Bovkir R., İl S.  
 SURVEY REVIEW, vol.55, pp.95-113, 2023 (SCI-Expanded)
- V. **Assessment of Urban Quality of Life Index at Local Scale with Different Weighting Approaches**  
 Bovkir R., Ustaoglu E., Aydinoglu A.  
 SOCIAL INDICATORS RESEARCH, vol.165, pp.655-678, 2023 (SSCI)
- VI. **Implementing a mass valuation application on interoperable land valuation data model designed as an extension of the national GDI**  
 Aydinoglu A., Bovkir R., Colkesen I.  
 SURVEY REVIEW, vol.53, pp.349-365, 2021 (SCI-Expanded)
- VII. **Spatial distribution of GDP based on integrated NPS-VIIRS nighttime light and MODIS EVI data: a case study of Turkey**  
 Ustaoglu E., Bovkir R., Aydinoglu A. C.  
 ENVIRONMENT, DEVELOPMENT AND SUSTAINABILITY A MULTIDISCIPLINARY APPROACH TO THE THEORY AND PRACTICE OF SUSTAINABLE DEVELOPMENT, vol.23, pp.10309-10343, 2021 (SCI-Expanded)
- VIII. **Providing land value information from geographic data infrastructure by using fuzzy logic analysis approach**  
 Bovkir R., Aydinoglu A. C.  
 LAND USE POLICY, vol.78, pp.46-60, 2018 (SSCI)
- IX. **Generic land registry and cadastre data model supporting interoperability based on international standards for Turkey**  
 Aydinoglu A. C., Bovkir R.  
 LAND USE POLICY, vol.68, pp.59-71, 2017 (SSCI)

## Articles Published in Other Journals

- I. **Urban green infrastructure for a climate neutral future: assessment of urban rooftop agriculture potential in İstanbul with GIS-based decision analysis**  
 BOVKIR R.  
 GEOMATIK, no.1, 2025 (ESCI)
- II. **Toplu taşınmaz değerlemede makine öğrenme algoritmalarının kullanımı ve konumsal/konumsal olmayan özniteliklerin tahmin doğruluğuna etkilerinin karşılaştırılması**  
 AYDINOĞLU A. Ç., BOVKIR R., ÇÖLKESEN İ.  
 Jeodezi ve jeoinformasyon dergisi (Online), vol.10, no.1, pp.63-83, 2023 (Peer-Reviewed Journal)
- III. **Geographical big data management and analysis in smart cities: the example of air quality**  
 Aydinoglu A. C., Bovkir R., Bulut M.  
 GEOMATIK, vol.7, no.3, pp.174-186, 2022 (Peer-Reviewed Journal)
- IV. **Yeni Teknolojik Gelişmelerin Coğrafi Bilgi Sistemlerine Etkisi**  
 ŞAHİN E. K., BOVKIR R., AYDINOĞLU A. Ç.  
 Harita Dergisi, vol.86, no.163, pp.1-16, 2020 (Peer-Reviewed Journal)

## Books

- I. **Cadastral Renewal and Automation Project in Cyprus.**  
 ŞAHİN N., İZMİRLİ B., ÇOLAKOĞLU S., BOVKIR R.  
 in: Cadastre: Geo-Information Innovations in Land Administration, Yomralioglu, Tahsin McLaughlin, John, Editor, Springer International Publishing, Nature, pp.191-207, 2017

## Papers Presented at Peer-Reviewed Scientific Conferences

- I. **Analysing E-Commerce Warehouse Site Suitability with Network-Based GIS Techniques for Economic Sustainability**  
Dolu D., BOVKIR R., ŞİŞMAN S., AYDINOĞLU A. Ç.  
8th International Conference on Sustainable Development, 4 - 08 May 2022, (Summary Text)
- II. **Big urban data visualization approaches within the smart city: Gis-based open-source dashboard example**  
Bovkir R., Aydinoglu A.  
International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, Karabük, Turkey, 27 - 29 October 2021, vol.46, pp.125-130, (Full Text)
- III. **DEVELOPING A MOBILE APPLICATION FOR SMART REAL ESTATE INFORMATION**  
AYDINOĞLU A. Ç., BOVKIR R.  
5th International Conference onSmart City Applications, 7 - 09 October 2020, (Full Text)
- IV. **Taşınmaz Değerlemede Makine Öğrenme Algoritmalarının Kullanımı: Pendik Örneği**  
SEYREK E. C., ÇÖLKESEN İ., BOVKIR R., AYDINOĞLU A. Ç.  
10. Türkiye Ulusal Fotogrametri ve Uzaktan Algılama Birliği (TUFUAB) Teknik Sempozyumu, Aksaray, Turkey, 25 - 27 April 2019, pp.96-102, (Full Text)
- V. **Designing a Real Estate Valuation Model for Turkey by Using National GDI**  
AYDINOĞLU A. Ç., BOVKIR R.  
EURASIAN GIS CONGRESS 2018, 4 - 07 September 2018, (Full Text)
- VI. **Management of Big Geographic Data for Smart City Applications**  
AYDINOĞLU A. Ç., BOVKIR R.  
FIG Congress 2018-Embracing our smart world where the continents connect: enhancing the geospatial maturity of societies, 6 - 11 May 2018, (Full Text)
- VII. **Calculating Land Values by Using Advanced Statistical Approaches inPendik**  
BOVKIR R., ÇÖLKESEN İ., AYDINOĞLU A. Ç.  
FIG Congress 2018-Embracing our smart world where the continents connect: enhancing the geospatial maturity of societies, 6 - 11 May 2018, (Full Text)
- VIII. **Designing Land Administration Data Infrastructure Supporting the Interoperability between Applications: Land Valuation Example for Turkey**  
AYDINOĞLU A. Ç., BOVKIR R.  
INTERNATIONAL SYMPOSIUM ON GIS APPLICATIONS IN GEOGRAPHY AND GEOSCIENCES- ISGGG-2017, 18 - 21 October 2017, (Full Text)
- IX. **An Approach for Calculating Land Valuation by Using NSPIRE Data Models**  
AYDINOĞLU A. Ç., BOVKIR R.  
The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XLII-4/W6, 20174th International GeoAdvances Workshop, 14 - 15 October 2017, (Full Text)
- X. **Providing Data Interoperability for the Applications Using Land Registry and Cadastre Base Data Sets**  
AYDINOĞLU A. Ç., BOVKIR R.  
16th International Multidisciplinary Scientific GeoConference SGEM, Albena, Bulgaria, 28 June - 07 July 2016, vol.1, (Full Text)
- XI. **CADASTRAL RENEWAL AND AUTOMATION PROJECT IN CYPRUS**  
ŞAHİN N., İZMİRLİ B., ÇOLAKOĞLU S., BOVKIR R.  
WCS- CE World Cadastre Summit-Congress Exhibition, 20 - 25 April 2015, (Full Text)

## Funded Projects

Bovkir R., TUBITAK Project, Developing Smart City Applications Using Machine Learning Techniques in BigGeographical

Data Management with National Geographic Information Systems: Real Estate Management Example, 2022 - 2025  
TUBITAK Project, Enabling Interoperability in Big Geographic Data Management and Analysis for Smart Cities , 2017 - 2020  
Bovkir R., Project Supported by Higher Education Institutions, Development of Real Estate Valuation Data Model and Analysis Tools Interoperable with Turkish National GIS, 2016 - 2017

## Metrics

Publication: 38  
Citation (WoS): 97  
Citation (Scopus): 120  
H-Index (WoS): 5  
H-Index (Scopus): 6