

# ERDAL ÖZDOĞAN

## ASST. PROF.

Email : erdalozdogan@uludag.edu.tr

### International Researcher IDs

ScholarID: EYfOxpQAAAAJ

ORCID: 0000-0002-3339-0493

Publons / Web Of Science ResearcherID: JCE-8167-2023

ScopusID: 57796779300

Yoksis Researcher ID: 387305

### Education

Doctorate 2015 - 2020	Gazi University, Bilişim Enstitüsü, Bilişim Sistemleri, Turkey
Undergraduate 2016 - 2019	Anadolu University, Açıköğretim Fakültesi, Yönetim Bilişim Sistemleri Bölümü (Aöf), Turkey
Postgraduate 2011 - 2012	Gazi University, Bilişim Enstitüsü, Bilgisayar Eğitimi, Turkey
Undergraduate 1994 - 2000	Ankara University, Fen Fakültesi, Astronomi Ve Uzay Bilimleri Bölümü, Turkey

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Kampüs ağlarında nesnelerin interneti için genel mimari ve protokol tasarımı, Gazi University, Bilişim Enstitüsü, Bilişim Sistemleri, 2020

### Academic Titles / Tasks

Assistant Professor 2024 - Continues	Bursa Uludağ University, İnegöl İşletme Fakültesi, Yönetim Bilişim Sistemleri
Lecturer 2023 - 2024	Gazi University, Rektörlük

### Supported Projects

1. Özdoğan E., Tanrıverdi M., Ceran O., Uysal M., Üstündağ M. T., Ayaz Z., Project Supported by Other Private Institutions, Ön Lisans ve Lisans Düzeyinde Web3 Teknolojilerine Yönelik Çevrimiçi Eğitim Platformu Oluşturulması, 2023 - 2024

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

1. **Structured Defense Model Against DNP3-Based Critical Infrastructure Attacks**  
Özdoğan E.  
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, no.2024, pp.1-19, 2024 (SCI-Expanded)
2. **A Comprehensive Analysis of the Machine Learning Algorithms in IoT IDS Systems**  
Özdoğan E.  
IEEE ACCESS, vol.12, pp.46785-46811, 2024 (SCI-Expanded)
3. **Adaptive Hybrid Application Protocol for IoT**  
Özdoğan E., Erdem O. A., Ozalp A. N.  
ACTA POLYTECHNICA HUNGARICA, vol.21, no.2, pp.271-290, 2024 (SCI-Expanded)

## Articles Published in Other Journals

1. **A Web-based Decision Support System for Managing Course Timetabling in Online Education**  
UYSAL M., CERAN O., TANRIVERDİ M., ÖZDOĞAN E., ÜSTÜNDAĞ M. T.  
JOURNAL OF POLYTECHNIC-POLITEKNİK DERGISI, 2024 (ESCI)
2. **Systematic Analysis of Infrastructure as Code Technologies**  
Özdoğan E., Ceran O., Üstündağ M. T.  
Gazi University Journal of Science Part A: Engineering and Innovation, vol.10, no.4, pp.452-471, 2023 (Peer-Reviewed Journal)
3. **Layered management approach to cyber security of IoT solutions**  
ÖZDOĞAN E., DAŞ R.  
INTERNATIONAL JOURNAL OF GRID AND UTILITY COMPUTING, vol.14, 2023 (ESCI)
4. **IoT based a Smart Home Automation System Design: Simulation Case**  
ÖZDOĞAN E., DAŞ R.  
Balkan Journal of Electrical and Computer Engineering, vol.9, 2021 (Peer-Reviewed Journal)
5. **NESNELERİN İNTERNETİ İÇİN HİBRİT UYGULAMA KATMANI PROTOKOL TASARIMI**  
ÖZDOĞAN E., ERDEM O. A.  
Mühendislik Bilimleri ve Tasarım Dergisi, vol.8, 2020 (Peer-Reviewed Journal)

## Books

1. **Analysis of IoT Security Datasets**  
Özdoğan E., Ceran O.  
in: Current Studies in Data Science and Analytics, M.Hanefi CALP,Resul Bütüner, Editor, ISRES Publishing, Konya, pp.124-143, 2024
2. **Cloud, Fog, and Edge Computing for IoT-Enabled Cognitive Buildings**  
ÖZDOĞAN E.  
in: IoT Edge Solutions for Cognitive Buildings, Cicirelli, Franco. Guerrieri, A., Vinci, A., Spezzano, G., Editor, Springer Nature, pp.23-52, 2023

## Papers Published in Refereed Scientific Meetings

- 1. Simulation Application of Fog Computing for IoT Solutions in Smart Cities**  
Özdoğan E.  
4. INTERNATIONAL SELÇUK SCIENTIFIC RESEARCH AND INNOVATION CONGRESS, Konya, Turkey, 24 - 25 August 2024
- 2. Two-Stage Protection Strategy for IoT Intrusion Detection System**  
ÖZDOĞAN E.  
6th International İstanbul Contemporary Scientific Research Congress, İstanbul, Turkey, 5 - 07 July 2024, pp.466-468, İstanbul, Turkey, 5 - 07 July 2024, pp.466-468
- 3. Utilization of Machine Learning Techniques in Student Selection for Erasmus+ Learning Mobility**  
ÖZDOĞAN E., CERAN O., BİNGÖL A. S.  
20TH ERASMUS AND CAREER-EU CONGRESS AND EXHIBITION (ERACON 2024), Porto, Portugal, 24 - 28 June 2024, pp.30
- 4. Layer-based examination of cyber-attacks in IoT**  
ÖZALP A. N., ALBAYRAK Z., ÇAKMAK M., ÖZDOĞAN E.  
2022 International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA), Ankara, Turkey, 9 - 27 June 2022
- 5. Hybrid Application Layer Protocol Design for IoT Environments**  
ÖZDOĞAN E., ERDEM O. A.  
6th International Conference on Computer Science, Engineering and Information Technology (CSEIT-2019), Zürich, Switzerland, 22 - 24 November 2019, pp.267-286
- 6. Milli Eğitim Bakanlığı Cisco Netacad Eğitimlerinin İncelenmesi**  
ÖZALP A. N., ÖZDOĞAN E., ÖZEREN A.  
Akademik Bilişim '11, Malatya, Turkey, 02 February 2011

## Courses

### Postgraduate

Veritabanı Yönetim Sistemleri, Postgraduate, 2024 - 2025  
İşletmelerde Veri Madenciliği Uygulamaları, Postgraduate, 2024 - 2025  
Cloud Computing Security, Postgraduate, 2023 - 2024  
Open Source Intelligence in Cybersecurity, Postgraduate, 2023 - 2024

### Undergraduate

Algoritma ve Programlamaya Giriş, Undergraduate, 2024 - 2025  
Siber Güvenlik, Undergraduate, 2024 - 2025  
Veri Yapıları ve Programlama, Undergraduate, 2024 - 2025  
Mobil Programming, Undergraduate, 2024 - 2025  
İleri Programlama, Undergraduate, 2024 - 2025  
Web Based Programming, Undergraduate, 2024 - 2025  
Machine Learning, Undergraduate, 2023 - 2024  
Computer Networks, Undergraduate, 2023 - 2024  
Internet of Things, Undergraduate, 2023 - 2024  
Cryptography, Undergraduate, 2023 - 2024  
Artificial Intelligence, Undergraduate, 2022 - 2023

## Peer Reviews in Scientific Publications

AEJ - ALEXANDRIA ENGINEERING JOURNAL, Journal Indexed in SCI-E, February 2025  
INTERNET OF THINGS, Journal Indexed in SCI-E, January 2025  
INTERNET OF THINGS, Journal Indexed in SCI-E, August 2024

INTERNATIONAL JOURNAL OF COMMUNICATION SYSTEMS, SCI Journal, August 2024  
JOURNAL OF SIMULATION, Journal Indexed in SCI-E, April 2022

## Metrics

Publication: 16  
Citation (WoS): 5  
Citation (Scopus): 34  
H-Index (WoS): 2  
H-Index (Scopus): 3

## Research Areas

Computer Sciences, Cryptography, Computer Networks, Network Architecture, Artificial Intelligence, Computer Learning and Pattern Recognition