OSMAN AYHAN ERDEM
PROF.

Email : ayerdem@gazi.edu.tr

Office Phone : +90 312 202 8571 Extension: 28571

Address : Gazi Üniversitesi Teknoloji Fakültesi Bilgisayar Mühendisliği Bölümü Taşkent Binası No:B406 Teknikokullar, Beşevler, Ankara/Türkiye

International Researcher IDs

ScholarID: vFBj9rsAAAAJ

ORCID: 0000-0001-7761-1078

Publons / Web Of Science ResearcherID: B-9023-2016

ScopusID: 8339453400

Yoksis Researcher ID: 4438

Biography

Prof. Dr. O. Ayhan ERDEM received his bachelor's, master's and doctorate degrees from Gazi University Institute of Science and Technology. He did his patriotic service as a reserve officer between 1985-1987. Between 1985-1989, he worked as a Research Assistant at Gazi University, Faculty of Technical Education, Department of Electrical and Electronics Education. In 1988, he took part in the establishment of the Department of Computer Systems Education. In 1990, he attended Indiana University (USA) English Language Education Program. He completed his Computer Engineering Education at Purdue University (USA). He was in Germany (Gut Wehlitz 04435 Leipzig-Schkeuditz Germany) between 23.05.19.06.2005 in accordance with the LDV project (TR/04/A/F/EX1-018) to train Technical Teachers in the field of Electronics and Computers.   He has been working as a lecturer between 1989-2001, Assistant Professor between 2001-2007, Associate Professor between 2007-2013 and Professor after 2013. In 2011, he took part in the establishment of the Computer Department of the Faculty of Technology. He served as the Founding Vice Dean of Gazi University Faculty of Technology between 2011-2014. He has published many articles and books in international journals and has research interests in Computer Networks, Artificial Intelligence, Generative Artificial Intelligence (GPT), Fuzzy Logic. He is currently a Professor at Gazi University, Faculty of Technology, Department of Computer Engineering.

Learning Knowledge

Doctorate 1996 - 2001	Gazi University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (Dr), Turkey
Postgraduate 1986 - 1989	Gazi University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Eğitimi (Yl) (Tezli), Turkey
Undergraduate 1978 - 1982	Gazi University, Teknik Eğitim Fakültesi, Elektrik Elektronik Eğitimi, Turkey

Foreign Languages

English, C1 Advanced

Certificates, Courses and Trainings

IT, UBMK'21 Uluslararası Bilgisayar Bilimleri ve Mühendisliği Konferansı, Gazi Üniversitesi, 2021
Vocational Training, Teknik Öğretmen Yetiştirme , VITALIS, LEIPZIG/ALMANYA, 2005
IT, Computer Technology, Purdue University, USA, 1990
Foreign Language, Indiana Universitesi, Yabancı Dil Kursu, Indiana University, 1990

Dissertations

Doctorate, The Design and application of fuzzy logic control of the intersection signalization, Gazi University, Fen Bilimleri Enstitüsü, -, 2001
Postgraduate, Disk type induction motor design and parameters determination, Gazi University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Eğitimi (Yl) (Tezli), 1989

Academic Titles / Tasks

Professor 2013 - Continues	Gazi University, Teknoloji Fakültesi, Bilgisayar Mühendisliği
Associate Professor 2011 - 2013	Gazi University, Teknoloji Fakültesi, Bilgisayar Mühendisliği
Associate Professor 2007 - 2011	Gazi University, Teknik Eğitim Fakültesi, Elektronik ve Bilgisayar Eğitimi
Assistant Professor 2002 - 2007	Gazi University, Teknik Eğitim Fakültesi, Elektronik ve Bilgisayar Eğitimi
Lecturer 1989 - 2002	Gazi University, Teknik Eğitim Fakültesi, Elektronik ve Bilgisayar Eğitimi
Research Assistant 1985 - 1989	Gazi University, Teknik Eğitim Fakültesi, Elektrik Elektronik Eğitimi

Supported Projects

1. ERDEM O. A., Project Supported by Higher Education Institutions, KABLOSUZ ALGILAYICI AĞLARDA ENERJİ VERİMLİ MAC PROTOKOLÜ TASARIMI VE UYGULAMASI, 2011 - 2014
2. ERDEM O. A., Project Supported by Higher Education Institutions, Seri İletişim Protokolünün Asansöre Uygulanması, 2005 - 2007
3. ERDEM O. A., Project Supported by Higher Education Institutions, Bilgisayar Ağında Server IP Numaralarının

Segmentlere Dengeli Dağıtımı ile Ağ Trafiğinin Verimi Arttırma, 2004 - 2006

4. Barışçı N., Erdem O. A., Project Supported by Higher Education Institutions, Kardiyak Doppler Sinyallerinin Kaydedilmesi ve Spektral Analiz Yöntemlerle İncelenmesi, 2003 - 2004

5. Barışçı N., Erdem O. A., Project Supported by Higher Education Institutions, Kardiyak Doppler Sinyallerinin Neuro Fuzzy Algoritması ile Sınıflandırılması, 2002 - 2003

Awards

1. Erdem O. A., Kurt Ç., Real-time anomaly detection and mitigation using streaming telemetry in SDN", Tübitak, October 2020

2. Erdem O. A., Duman E., Anomaly Detection in Videos Using Optical Flow and Convolutional Autoencoder, Tübitak, May 2020

3. Erdem O. A., Statistical Edge Detection and Circular Hough Transform for Optic Localization, Tubitak, June 2019

4. Erdem O. A., Formula G 6. Güneş Arabaları Yarışına Katılım, Tubitak, August 2010

5. Erdem O. A., A special Course on Total Quality Management and Suppliers Qualification Methods, Schweinfurt University, May 2006

Jury Memberships

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Kırşehir Ahi Evran Üniversitesi, August, 2024

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Gazi Üniversitesi, February, 2024

Post Graduate, Post Graduate, Gazi Üniversitesi, January, 2024

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Gazi Üniversitesi, January, 2024

Post Graduate, Post Graduate, Gazi Üniversitesi, January, 2024

Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Sivas Cumhuriyet Üniversitesi, January, 2024

Doctorate, Doctorate, Gazi Üniversitesi, December, 2023

Doctorate, Doctorate, Gazi Üniversitesi, November, 2023

Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Gazi Üniversitesi, June, 2023

Doctorate, Doctorate, Gazi Üniversitesi, June, 2023

Doctorate, Doctorate, Gazi Üniversitesi, February, 2023

Post Graduate, Post Graduate, Gazi Üniversitesi, January, 2023

Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Gazi Üniversitesi, June, 2022

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Gazi Üniversitesi, February, 2022

Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Gazi Üniversitesi, December, 2021

Doctorate, Doctorate, Fırat Üniversitesi, April, 2021

Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Ankara Üniversitesi, February, 2021

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Gazi Üniversitesi, December, 2020

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Haliç Üniversitesi, November, 2020

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Türk Hava Kurumu Üniversitesi, May, 2019

Associate Professor Exam, Associate Professor Exam, Bogazici University, April, 2016

Associate Professor Exam, Associate Professor Exam, Middle East Technical University, October, 2015

Associate Professor Exam, Associate Professor Exam, Bogazici University, October, 2015

Associate Professor Exam, Associate Professor Exam, Bogazici University, October, 2015

Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Selçuk Üniversitesi, April, 2015

Associate Professor Exam, Associate Professor Exam, Istanbul Commerce University, April, 2015

Associate Professor Exam, Associate Professor Exam, Gazi University, April, 2014

Associate Professor Exam, Associate Professor Exam, Gazi University, April, 2014

Associate Professor Exam, Associate Professor Exam, Bogazici University, April, 2014

Taught Courses And Trainings

Erdem O. A., BELTEK Bilgisayar Kursları, 1999 - 2013

Erdem O. A., Milli Eğitim Bkanalığı Hizmetiçi Bilgisayar Eğitimi, 1993 - 1993

Erdem O. A., Milli Eğitim Bakanlığı Hizmetiçi Eğitim Kursları, 1991 - 1992

Published journal articles indexed by SCI, SSCI, and AHCI

1. **Adaptive Hybrid Application Protocol for IoT**
   Özdoğan E., Erdem O. A., Özalp A. N.
   Acta Polytechnica Hungarica, vol.21, no.2, pp.271-290, 2024 (SCI-Expanded)
2. **Children's Sentiment Analysis from Texts by Using Weight Updated Tuned with Random Forest Classification**
   Ahmed Bilal A., ERDEM O. A., TOKLU S.
   IEEE Access, vol.12, pp.70089-70104, 2024 (SCI-Expanded)
3. **A Multi-Model Proposal for Classification and Detection of DDoS Attacks on SCADA Systems**
   Söğüt E., Erdem O. A.
   APPLIED SCIENCES, vol.13, no.10, pp.1-20, 2023 (SCI-Expanded)
4. **Real-time anomaly detection and mitigation using streaming telemetry in SDN**
   Kurt C., Erdem O. A.
   TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.28, pp.2448-2466, 2020 (SCI-Expanded)
5. **Statistical Edge Detection and Circular Hough Transform for Optic Disk Localization**
   ÜNVER H. M., Kokver Y., Duman E., ERDEM O. A.
   APPLIED SCIENCES-BASEL, vol.9, no.2, 2019 (SCI-Expanded)
6. **Anomaly Detection in Videos Using Optical Flow and Convolutional Autoencoder**
   Duman E., Erdem O. A.
   IEEE ACCESS, vol.7, pp.183914-183923, 2019 (SCI-Expanded)
7. **Applying a multi-sensor system to predict and simulate the tool wear using artificial neural networks**
   Salimiasl A., Erdem A., Rafighi M.
   SCIENTIA IRANICA, vol.24, no.6, pp.2864-2874, 2017 (SCI-Expanded)
8. **YENİ BİR AĞ GÜVENLİĞİ YAKLAŞIMI: DİNAMİK ZEKİ GÜVENLİK DUVARI MİMARİSİ**
   Erdem O. A., Kocaoğlu R.
   JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.29, no.4, pp.707-715, 2014 (SCI-Expanded)

9. **BSC-MAC: Energy efficiency in wireless sensor networks with base station control**
Toklu S., ERDEM O. A.
COMPUTER NETWORKS, vol.59, pp.91-100, 2014 (SCI-Expanded)

10. **A NEW APPROACH FOR NETWORK SECURITY: DYNAMIC INTELLIGENT FIREWALL ARCHITECTURE**
ERDEM O. A., Kocaoglu R.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.29, no.4, pp.707-715, 2014 (SCI-Expanded)

11. **Importance of cytokines, oxidative stress and expression of BCL-2 in the pathogenesis of non-alcoholic steatohepatitis**
Torer N., Ozenirler S., ATAK YÜCEL A., Bukan N., ERDEM O. A.
SCANDINAVIAN JOURNAL OF GASTROENTEROLOGY, vol.42, no.9, pp.1095-1101, 2007 (SCI-Expanded)

12. **PICTool: Integrated hardware and software for teaching/learning FLC using microcontrollers**
ERDEM O. A., Akcayol M. A., Orman A.
INTELLIGENT AUTOMATION AND SOFT COMPUTING, vol.12, no.4, pp.411-417, 2006 (SCI-Expanded)

13. **Turkish Times New Roman, Arial, and handwriting characters recognition by Neural Network Yapay Šinir Ağlari ile Türkçe Times New Roman, Arial ve elyazisi Karakterleri Tanima**
Erdem O. A., Uzun E.
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.20, no.1, pp.13-19, 2005 (SCI-Expanded)

14. **An educational tool for fuzzy logic controller and classical controllers**
Akçayol M. A., Elmas Ç., Erdem O. A., Kurt M.
COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, vol.12, no.2, pp.126-135, 2004 (SCI-Expanded)

Articles Published in Other Journals

1. **Comparative Analysis of Traditional Machine Learning and Transformer-based Deep Learning Models for Text Classification**
Aydın N., Erdem O. A., Tekerek A.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, 2024 (ESCI)

2. **Machine Learning-Based DDoS Attack Detection on SDN-Based SCADA Systems**
Söğüt E., Tekerek A., Erdem O. A.
Gazi Mühendislik Bilimleri Dergisi, vol.9, no.3, pp.596-611, 2023 (Peer-Reviewed Journal)

3. **Machine Learning-Based DDoS Attack Detection on SDN-Based SCADA Systems**
Söğüt E., Erdem O. A.
Gazi Mühendislik Bilimleri Dergisi, vol.1, no.1, pp.1-10, 2023 (Peer-Reviewed Journal)

4. **Detection of Different Windows PE Malware Using Machine Learning Methods**
Koçak A., Söğüt E., Alkan M., Erdem O. A.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.26, no.3, pp.1185-1197, 2023 (ESCI)

5. **Detecting Different Types of Distributed Denial of Service Attacks**
Söğüt E., Oyucu S., Erdem O. A.
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.9, no.1, pp.12-25, 2021 (Peer-Reviewed Journal)

6. **HYBRID APPLICATION LAYER PROTOCOL DESIGN FOR INTERNET OF THINGS**
Özdoğan E., Erdem O. A.
Mühendislik Bilimleri ve Tasarım Dergisi, vol.8, no.1, pp.285-304, 2020 (Peer-Reviewed Journal)

7. **Cyber Terror Attack Analysis for Industrial Control Systems (SCADA)**
Söğüt E., Erdem O. A.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.23, pp.557-566, 2020 (ESCI)

8. **Development of Reserved Reliable Flow Control Algorithm in Mobile Ad Hoc Networks**
DOĞRU İ. A., ERDEM O. A., AKCAYOL M. A.

Gazi Journal of Engineering Sciences, vol.4, no.3, pp.144-156, 2018 (Peer-Reviewed Journal)

9. **Multi Featured Content Based Image Retrieval Using Color and Texture Features**
Ayan M., ERDEM O. A., BİLGE H. Ş.
Applied Mechanics and Materials, vol.850, pp.136-143, 2016 (Peer-Reviewed Journal)

10. **Deciding Clustering Algorithms for Wireless Sensor Networks**
Murad A MOHAMMED A., ERDEM O. A.
Published in IOSR Journal of Engineering, vol.5, no.6, pp.8-14, 2015 (Peer-Reviewed Journal)

11. **Mesleki Eğitimde Etkileşimli 3B Eğitimin Uygulanması ve Streoskopik 3B Teknolojisi Kullanımı**
Güler O., Erdem O. A.
Bilişim Teknolojileri Dergisi, vol.7, no.3, pp.1-11, 2014 (Peer-Reviewed Journal)

12. **Sanal Ortam Ağlarında 6to4 Otomatik Tünelleme Yöntemi ile Performans Değerlendirilmesi**
Arsan A. H., ERDEM O. A.
INTERNATIONAL JOURNAL OF INFORMATICS TECHNOLOGIES, vol.7, no.2, pp.1-10, 2014 (Peer-Reviewed Journal)

13. **Forest Fire Behavior Prediction With Multivariate Regression**
Erdem O. A.
NWSA-Technological Applied Sciences, vol.9, no.3, pp.13-21, 2014 (Peer-Reviewed Journal)

14. **Sanal Altyapı Ortamında Farklı İşletim Sistemi Kullanarak IPv4 ve IPv6 Performans Değerlendirmesi/ Performance Analysis of IPv4 vs IPv6 in Virtual Environment Using Different Operating Systems**
ERDEM O. A., Arsan Adnan Hameed H.
Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.30, no.2, pp.101-106, 2014 (Peer-Reviewed Journal)

15. **Yazılım Projelerinin Geliştirme Sürecinde Yönetim**
ERDEM O. A., Aleaa E. Y.
Bilişim Teknolojileri Dergisi, vol.7, no.1, pp.1-9, 2014 (Peer-Reviewed Journal)

16. **Kablosuz Algılayıcı Ağlarda Enerji Verinmli MAC Protokolleri**
TOKLU S., ERDEM O. A.
DEÜ Mühendislik Fakültesi Mühendislik Bilimleri Dergisi, vol.15, no.3, pp.47-67, 2013 (Peer-Reviewed Journal)

17. **Tıbbi Verilerin GPRS ile Gerçek Zamanlı İzlenmesi**
Hüssein A., ERDEM O. A.
Gazi Üniversitesi Fen Bilimleri Dergisi, vol.1, no.1, pp.93-101, 2013 (Peer-Reviewed Journal)

18. **IDLE ve POWER DOWN Güç Durumunun Enerji Başarım Değerlendirmesi**
TOKLU S., ERDEM O. A.
Bilişim Teknolojileri Dergisi, vol.5, no.3, pp.35-40, 2012 (Peer-Reviewed Journal)

19. **Öğrenci Başarısını Etkileyen Faktörlerin Veri Madenciliği Yöntemleriyle İncelenmesi**
Kurt Ç., Erdem O. A.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.15, no.2, pp.111-116, 2012 (ESCI)

20. **Yazılım Projelerinde Risk Yönetimi**
ERDEM O. A., Younis A.
Bilişim Teknolojileri Dergisi, vol.1, no.1, pp.1-5, 2012 (Peer-Reviewed Journal)

21. **Finansal Piyasalarda Trend Analizine Yardımcı Olacak İndikatörlerin Geliştirilmesi**
ERDEM O. A., ÇETİNET E.
Gazi Üniversitesi Bilişim Enstitüsü, Bilişim Teknolojileri Dergisi, vol.4, no.2, pp.1-10, 2011 (Peer-Reviewed Journal)

22. **Kablosuz Bilgisayar Ağlarının Performanslarının Karşılaştırmalı Olarak İncelenmesi**
ERDEM O. A., NESLİHAN T.
INTERNATIONAL JOURNAL OF INFORMATICS TECHNOLOGIES, vol.2, no.2, pp.1-10, 2009 (Peer-Reviewed Journal)

23. **Genel ve Yerel Seçimler İçin Web Tabanlı Uygulama ESeçim**
ERDEM O. A., ERKAYMAZ O.
EJournal of New World Sciences Academy Technologial Applied Sciences, vol.4, no.2, pp.136-150, 2009 (Peer-Reviewed Journal)

24. **THE CONSTITUTE OF INTERNATIONAL ELECTRONIC DATABASE FOR THE CATTLES IDENTIFYING AND APPLICATION IN TÜRKİYE**
ERDEM O. A., TUNA H.

E-Journal of New World Sciences Academy, vol.3, no.2, pp.268-287, 2008 (Peer-Reviewed Journal)

25. **Aort Yetmezliği Ve Darlığının Hızlı Fourıer Dönüşümü ve Ar Yöntemleriyle Belirlenmesi**
BARIŞCI N., ERDEM O. A.
EJournal of New World Sciences Academy,, vol.3, no.1, pp.107-116, 2008 (Peer-Reviewed Journal)

26. **Kavşak trafik sinyalizasyon sistemi için bulanık mantık tabanlı gerçek zamanlı denetleyici tasarımı ve uygulaması**
ERDEM O. A.
Journal of New World Sciences Academy, vol.2, no.4, pp.241-255, 2007 (Peer-Reviewed Journal)

27. **İnternet tabanlı uzaktan güvenlik sistemi tasarımı ve uygulaması**
ERDEM O. A., AKCAYOL M. A., Haydar T.
eJournal of New World Sciences Academy, vol.2, no.2, pp.78-86, 2007 (Peer-Reviewed Journal)

28. **Internet based remote security system design and implementation**
ERDEM O. A., AKCAYOL M. A., TUNA H.
e-Journal of New World Sciences Academy Natural and Applied Sciences, vol.2, no.2, pp.78-86, 2007 (Peer-Reviewed Journal)

29. **Bulanık Mantık Denetimi ile Kavşaklarda Trafik Denetimi Sağlayan Yazılım**
Erdem O. A.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.3, no.3, pp.87-96, 2000 (ESCI)

30. **Bilgisayarlarda veri sıkıştırma ile elde edilecek kazanımlar**
ERDEM O. A., AKCAYOL M. A., AYDIN E.
Gazi Üniversitesi Fen Bilimleri Enstitüsü, vol.8, no.1, pp.46-55, 1995 (Peer-Reviewed Journal)

31. **Benefits of data compressing in computers**
ERDEM O. A., AKCAYOL M. A., AYDIN E.
Gazi University Journal of Science, vol.8, no.1, pp.46-55, 1995 (ESCI)

32. **Disk tipi asenkron motor ve parametrelerinin tayini**
Coşkun İ., Erdem O. A.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.2, no.1, pp.99-114, 1989 (ESCI)

Books & Book Chapters

1. **Attack Detection on Testbed for Scada Security**
Söğüt E., Erdem O. A.
in: Engineering Cyber-Physical Systems and Critical Infrastructures, D. Jude Hemanth,Tuncay Yigit,Utku Kose,Ugur Guvenc, Editor, Springer Nature, Aarau, pp.415-422, 2023

2. **Tweet and Account Based Spam Detection on Twitter**
GÜNGÖR K. N., ERDEM O. A., DOĞRU İ. A.
in: Lecture Notes on Data Engineering and Communications Technologies: Artificial Intelligence andApplied Mathematics in Engineering Problems, D. Jude Hemanth,Utku Kose, Editor, Springer, İSPANYA, pp.898-905, 2020

3. **Chapter 8: A Review of Research Studies on Cyber Terror**
Söğüt E., Erdem O. A.
in: IGI Global Reference Books, Arif Sarı, Editor, IGI Global Disseminator of Knowledge, Pennsylvania, pp.179-202, 2019

4. **Answers to Odd-Numbered Exercises**
ERDEM O. A.
in: Ayrık Matematik ve Uygulamaları, ÖMER AKIN, Murat ÖZBEYOĞLU, Editor, PALME YAYINCILIK, Ankara, pp.573-639, 2015

5. **Temel Bilgi Teknolojisi Kullanımı**
BAY Ö. F., ERDEM O. A.
Gazi Kitapevi, Ankara, 2006

6. **Web Teknolojileri FrontPage Dreamweaver HTML JavaScript ASP PHP**

ERDEM O. A., AKCAYOL M. A.

Seçkin Kitapevi, Ankara, 2005

7. **Bilgisayar Ağları ve Açık Sistem Mimarisi Linux ile Internet Servis Sağlayıcılarının Kurulumları ve Kurumsal Ağ Kurulumu**

ERDEM O. A.

Gazi Kitapevi, Ankara, 2004

8. **Temel Bilgi Teknolojileri Kullanımı**

Bay Ö. F., Erdem O. A., Demirel H., Ciylan B., Erkal B.

Gazi Kitapevi, Ankara, 2002

9. **Bilgisayar Haberleşme Teknolojisi Kitabı**

ERDEM O. A.

Nobel Kitapevi, Ankara, 1999

10. **Bilgisayar Ağları ve Uygulamaları**

ERDEM O. A.

Erberk Kitapevi, Ankara, 1996

Refereed Congress / Symposium Publications in Proceedings

1. **Generative Pre-trained Transformer (GPT) Models for Irony Detection and Classification**

Aytekin M., Erdem O. A.

4th International Informatics and Software Engineering Conference, Ankara, Turkey, 21 - 22 December 2023, vol.1, no.22, pp.1-8

2. **Attack Detection on Testbed for Scada Security**

Söğüt E., Erdem O. A.

4th International Conference on Artificial Intelligence and Applied Mathematics in Engineering ICAIAME 2022, Baku, Azerbaijan, 26 April 2022, vol.4, no.1, pp.415-422

3. **Applying Sentiment Analysis on Children's Stories**

Bilal A. A., ERDEM O. A., TOKLU S.

4th International Informatics and Software Engineering Conference, IISEC 2023, Ankara, Turkey, 21 - 22 December 2023, no.108

4. **A Research On The New Generation Artificial Intelligence Technology Generative Pretraining Transformer 3**

Aydin N., Erdem O. A.

3rd International Informatics and Software Engineering Conference, IISEC 2022, Ankara, Turkey, 15 - 16 December 2022

5. **Performance Analysis of Between Software Defined Wireless Network and Mobile Ad Hoc Network Under DoS Attack**

Polat H., Söğüt E., Polat O., Erdem O. A.

2019 3rd International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), Ankara, Turkey, 11 - 13 October 2019

6. **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

7. **Performance Comparison of the IEEE 802.15.4 Standard (ZigBee) Topologies**

Söğüt E., Erdem O. A.

8th International Conference on Advanced Technologies (ICAT'19), Sarajevo, Bosnia And Herzegovina, 26 - 30 August 2019, pp.315-319

8. **Anomaly Detection in Crowded Scenes Using Unsupervised Spatiotemporal Autoencoder**

DUMAN E., ERDEM O. A.

5th International Conference on Engineering and Natural Sciences (ICENS 2019), 12 - 16 June 2019

9. **Twıtter'da tweet ve hesap tabanlı spam tespiti**
GÜNGÖR K. N., ERDEM O. A., DOĞRU İ. A.
ICAIME 2019- Yapay Zeka ve Uygulamalı Matematik 2019 Uluslararası Konferansı'xx, Antalya, Turkey, 20 - 22 April 2019, vol.1, pp.898-905

10. **A Statistical Edge Detection Framework for Noisy Images**
Duman E., Erdem O. A.
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018

11. **Günümüzün Vazgeçilmez Sistemleri: Nesnelerin Haberleşmesi ve Kullanılan Teknolojiler**
Söğüt E., Erdem O. A.
2017 Akademik Bilişim Konferansları, Aksaray, Turkey, 8 - 10 February 2017, pp.1-8

12. **Early Diagnosis of Breast Cancer Using Data Mining And Machine Learning Methods**
Söğüt E., Erdem O. A.
3rd INTERNATIONAL CONFERENCE ON ENGINEERING AND NATURAL SCIENCES (ICENS 2017), Budapest, Hungary, 3 - 07 May 2017, pp.163

13. **Recommendations for xDSL Tecnologie and Applications**
SÖĞÜT E., OYUCU S., ERDEM O. A., POLAT H.
3rd International Conference on Engineering and Natural Science, Budapest, Hungary, 3 - 07 May 2017

14. **Recommendations for xDSL Technologies and Applications**
Söğüt E., Oyucu S., Erdem O. A., Polat H.
3rd International Conference on Engineering and Natural Sciences (ICENS 2017), Budapest, Hungary, 3 - 07 May 2017, pp.1166-1172

15. **An Adaptive Gaussian Filter For Edge-Preserving Image Smoothing**
KÖKVER Y., DUMAN E., ERDEM O. A., ÜNVER H. M.
International Conference on Mathematics and Mathematics Education (ICMME - 2017), Harran, 11 - 13 May 2017, pp.412-413

16. **Automatic Landmark Detection through Circular Hough Transform in Cephalometric X-rays**
Duman E., Kokver Y., ÜNVER H. M., ERDEM O. A.
10th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 30 November - 02 December 2017, pp.583-587

17. **A New Image Denoising Method Based On Region Growing Segmentation**
Duman E., ERDEM O. A.
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017

18. **Görme Engelli Bireyler için Ev Ortamının Kontrolü ve Ebeveynleri için Uzaktan İzlenmesi**
OYUCU S., SÖĞÜT E., POLAT H., ERDEM O. A.
Engellilerin Sosyal Refahı Açısından Uluslararası Bilgi ve İletişim Teknolojileri Kongresi 2015, Ankara, Turkey, 9 - 11 October 2015

19. **Control Of The House Envionment For Vısually Impired Individuals And Parents**
Oyucu S., Söğüt E., Polat H., Erdem O. A.
Uluslararası Engellilerin Sosyal Refahı Açısından Bilgi ve İletişim Teknolojileri Kongresi, Ankara, Turkey, 9 - 11 October 2015, pp.272-280

20. **Gelişmiş Israrcı Tehditler ve GIT Örneklerinin Karşılaştırılması**
Söğüt E., Erdem O. A.
8.Bilgi Güvenliği ve Kriptoloji Konferansı (ISCTURKEY 2015), Ankara, Turkey, 30 - 31 October 2015, pp.51-56

21. **Ortalama Tabanlı Kenar Koruyuculu GürültüGiderim Yöntemi**
DUMAN E., ERDEM O. A.
Signal Processing and Communications Applications Conference (SIU), 2015 23th, Malatya, Turkey, 16 - 19 May 2015, pp.1857-1860

22. **Edge preserving image denoising method based on averaging**
Duman E., ERDEM O. A.
23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015,

pp.1857-1860

23. **Predicting of Surface Fire with Artificial Neural Network**
Tuna H., ERDEM O. A.
INTERNATIONAL FOREST FIRE CONFERENCE IN BLACK SEA REGION, Turkey, 6 - 08 November 2014, pp.35-38

24. **Anadolu Liselerine Öğretmen Atama İşleminin Nesneye Yönelimli Veritabanı Programlama Kullanılarak Gerçekleştirilmesi**
Tuna H., Erdem O. A.
Akademik Bilişim'10 - XII. Akademik Bilişim Konferansı Bildirileri, Muğla, Turkey, 10 - 12 February 2012, vol.1, no.1, pp.509-615

25. **Bilgi Çağında e ticaret**
Erdem O. A., Efiloğlu Kurt Ö.
Uluslararası İnternet Etkinlikleri, İstanbul, Turkey, 7 - 09 June 2002

Academic and Administrative Experience

2018 - Continues	**Head of Department**	Gazi University, Fen Bilimleri Enstitüsü, Computer Engineering
2018 - Continues	**Head of Department**	Gazi University, Teknoloji Fakültesi, Bilgisayar Mühendisliği
2014 - 2016	**Head of Department**	Gazi University, Teknoloji Fakültesi, Bilgisayar Mühendisliği Bölümü
2014 - 2016	**Head of Department**	Gazi University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği (Yl) (Tezli)
2011 - 2014	**Vice Dean**	Gazi University, Teknoloji Fakültesi
2008 - 2013	**Head of Department**	Gazi University, Teknik Eğitim Fakültesi, Elektronik Ve Bilgisayar Eğitimi
2008 - 2011	**Deputy Head of Department**	Gazi University, Teknik Eğitim Fakültesi, Elektronik Ve Bilgisayar Eğitimi Bölümü
1994 - 1995	**Deputy Head of Department**	Gazi University, Teknik Eğitim Fakültesi, Elektronik Ve Bilgisayar Eğitimi Bölümü
1992 - 1994	**Head of Department**	Gazi University, Teknik Eğitim Fakültesi, Elektronik Ve Bilgisayar Eğitimi Bölümü
1991 - 1994	**Deputy Head of Department**	Gazi University, Teknik Eğitim Fakültesi, Elektronik Ve Bilgisayar Eğitimi Bölümü
1989 - 1990	**Deputy Head of Department**	Gazi University, Teknik Eğitim Fakültesi, Elektronik Ve Bilgisayar Eğitimi Bölümü

Courses

AÇIK SİSTEM MİMARİSİ VE KURUMSAL BİLGİSAYAR AĞLARI, Doctorate, 2022 - 2023
BM-401 İŞYERİ EĞİTİMİ, Undergraduate, 2017 - 2018, 2016 - 2017
BM-400 MEZUNİYET TEZİ, Undergraduate, 2017 - 2018, 2016 - 2017
TBML-313 BİLGİSAYAR AĞLARI, Undergraduate, 2017 - 2018
BMT-211 VERİ İLETİŞİMİ, Undergraduate, 2017 - 2018
BM-202 VERİ İLETİŞİMİ, Undergraduate, 2017 - 2018, 2016 - 2017

BMT-400 BİTİRME PROJESİ, Undergraduate, 2017 - 2018
BMT-214 GÖRSEL PROGRAMLAMA, Undergraduate, 2017 - 2018
BM-103 ALGORİTMA VE PROGRAMLAMAYA GİRİŞ, Undergraduate, 2017 - 2018, 2016 - 2017

Advising Theses

Erdem O. A., A new hybrid machine learning method for detection of cyber attacks on SCADA systems, Doctorate, E.SÖĞÜT(Student), 2023

ERDEM O. A., Abnormal Human Behavıor Recognıtıon For Surveıllance Systems, Doctorate, E.DUMAN(Student), 2020

ERDEM O. A., Real-Tıme Anomaly Detectıon And Mıtıgatıon Usıng Streamıng Telemetry In Sdn, Doctorate, Ç.KURT(Student), 2020

ERDEM O. A., Kampüs Ağlarında Nesnelerin İnterneti için Genel Mimari ve Protokol Tasarımı, Doctorate, E.ÖZDOĞAN(Student), 2020

ERDEM O. A., Heurıstıc And Scalable Routıng Protocol Based On Predıctıve Next Posıtıon For Vehıcular Ad Hoc Networks, Doctorate, R.KOCAOĞLU(Student), 2017

ERDEM O. A., The Advanced Persıstent Threat Detectıon Methods And Theır Exemplary Applıcatıon, Postgraduate, E.SÖĞÜT(Student), 2016

ERDEM O. A., Developıng An Alternatıve Method Wıth Clusterıng Algorıthms To Increase Energy Effıcıency In Wıreless Sensor Networks, Doctorate, M.AHMED(Student), 2016

ERDEM O. A., The Desıgn And Applıcatıon Of Content Based Image Retrıeval System Based On Color And Texture Features By Usıng Genetıc Algorıthm, Postgraduate, M.AYAN(Student), 2016

Erdem O. A., Bulut Bilişimin Türkiye'deki Durumu ve Geleceği, Postgraduate, R.Şahin(Student), 2015

ERDEM O. A., Using interactive 3 dimensional technologies in education and application of the information technology lessons, Postgraduate, O.GÜLER(Student), 2014

Erdem O. A., Sanallaştırmanın Bilgi Teknolojilerindeki Faydaları, Postgraduate, A.Tuncel(Student), 2013

ERDEM O. A., Security policy development system for active device vulnerabilities on network, Postgraduate, Ö.TONKAL(Student), 2013

ERDEM O. A., IPv6 transition mechanisms performance evaluation, Postgraduate, A.ADNAN(Student), 2013

ERDEM O. A., Design and implementation of an energy efficient mac protocol for wireless sensor networks, Doctorate, S.TOKLU(Student), 2013

ERDEM O. A., Naive bayes yöntemi ile blog içeriklerinin sınıflandırılması, Postgraduate, O.DEĞERLİ(Student), 2012

ERDEM O. A., Development and applicaton of reservation based reliable flow control in mobile ad hoc networks, Doctorate, İ.ALPER(Student), 2012

ERDEM O. A., Development signature steganography model using binary image, Postgraduate, M.KHAMEES(Student), 2011

ERDEM O. A., Yazılım projelerinde risk yönetimi, Postgraduate, A.E.(Student), 2011

ERDEM O. A., Monitoring of medical data by GPRS, Postgraduate, A.HUSSEİN(Student), 2010

ERDEM O. A., Açık anahtar kriptografisi ile sayısal imza tasarımı ve uygulaması, Postgraduate, M.KIRIMLI(Student), 2007

ERDEM O. A., Bilgisayarın insan beyin potansiyelinin geliştirilmesinde kullanılması ve uygulaması, Postgraduate, F.ŞAHİKA(Student), 2006

ERDEM O. A., Kablosuz bilgisayar ağlarının karşılaştırmalı incelenmesi, Postgraduate, N.TUĞRAL(Student), 2006

ERDEM O. A., Mikrodenetleyicili asansör denetiminde seri haberleşme kullanan bir modelin gerçekleştirilmesi, Postgraduate, A.ORMAN(Student), 2005

Activities in Scientific Journals

JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, Committee Member, 2023 - Continues
EJONS JOURNAL, Scientific Committee Membership, 2023 - Continues
NWSA- Engineering Sciences, Committee Member, 2023 - Continues

Technological Applied Sciences, Publication Committee Member, 2008 - Continues
TÜBAV Bilim Dergisi, Publication Committee Member, 2008 - Continues

Memberships / Tasks in Scientific Organizations

Akademik Bilişim Vakfı, Member of the Board of Trustees, 2021 - Continues, Turkey

Mobility Activity

Bilateral Colloboration Agreement, Other, Azerbaycan Teknik Üniversitesi, Azerbaijan, 2022 - 2022
Other Exchange Programme, Scientific Research, Vitalis, Germany, 2005 - 2005

Metrics

Publication: 159
Citation (WoS): 796
Citation (Scopus): 939
H-Index (WoS): 17
H-Index (Scopus): 19

Congress and Symposium Activities

3rd International Informatics and Software Engineering Conference, IISEC 2022, Attendee, Ankara, Turkey, 2022
5th International Conference on Engineering and Natural Sciences (ICENS 2019), Attendee, Antalya, Turkey, 2019
6th International Conference on Computer Science, Engineering and Information Technology (CSEIT-2019), Attendee, Basel, Switzerland, 2019
2019 3rd International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), Attendee, Ankara, Turkey, 2019
8th International Conference on Advanced Technologies (ICAT'19), Attendee, Sarajevo, Bosnia And Herzegovina, 2019
ICAIME 2019- Yapay Zeka ve Uygulamalı Matematik 2019 Uluslararası Konferansı'xx, Attendee, Antalya, Turkey, 2019
10th International Conference on Electrical and Electronics Engineering (ELECO), Attendee, Antalya, Turkey, 2017
İnternet Teknolojileri İle Uzaktan Eğitim UES08, Working Group, Ankara, Turkey, 2008

Research Areas

Computer Sciences, Computer Networks, Communications and Network Protocols, Artificial Intelligence, Computer Learning and Pattern Recognition, Fuzzy Sets and Systems, Natural Language Processing, Programming Languages, Software Engineering, Engineering and Technology

Representation and Promotion Activities

Institutional Promotion, Kütahya Germiyan Vocational Technical and Anatolian High School, Turkey, Kütahya, 2022 - 2022

Non Academic Experience

Gazi Üniversitesi
MİNGEÇEVİR DEVLET ÜNİVERSİTESİ
AZERBAYCAN DEVLET TEKNİK ÜNİVERSİTESİ
Gazi Üniversitesi
Gazi Üniversitesi
Gazi Üniversitesi
VITALIS, LEIPZIG/ALMANYA
Gazi Üniversitesi
University, Purdue University, Computer Engineering
INDIANA UNIVERSITY (USA)
PURDUE UNIVERSİTY (USA)
Gazi Üniversitesi
MİLLİ EĞİTİM BAKANLIĞI
IŞIK MAKİNA SANAYİ