

Asst. Prof. MERVE SEDEF DEMİRCİ

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: JWA-0679-2024

Yoksis Researcher ID: 191409

Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği (Dr), Turkey 2014 - 2020

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği (YI) (Tezli), Turkey 2012 - 2014

Undergraduate, Fatih University, Faculty Of Engineering, Department Of Computer Engineering, Turkey 2007 - 2012

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Sanal ağ güvenliği fonksiyonlarının enerji etkin yerleştirilmesi: Yöntem önerileri ve uygulama, Gazi University, Fen Bilimleri Enstitüsü, 2020

Postgraduate, Sosyal ağlardaki haber paylaşımı içeriklerinin sınıflandırılması, Gazi University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği (YI) (Tezli), 2014

Research Areas

Information Security and Reliability, Computer Networks, Artificial Intelligence, Computer Learning and Pattern Recognition

Academic Titles / Tasks

Assistant Professor, Gazi University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2022 - Continues

Research Assistant PhD, Gazi University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2020 - 2022

Research Assistant, Gazi University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2012 - 2020

Academic and Administrative Experience

Courses

Database Systems, Undergraduate, 2022 - 2023
Kablosuz Ağ Güvenliği, Postgraduate, 2022 - 2023
Yeni Nesil İletişim Teknolojileri, Postgraduate, 2022 - 2023
Mühendislik Projesi, Undergraduate, 2022 - 2023
UNIX Programming, Undergraduate, 2020 - 2021
Database Applications, Undergraduate, 2020 - 2021
Introduction to Computer Security, Undergraduate, 2020 - 2021

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **TwitterBulletin: An Intelligent and Real-Time Automated News Categorization Tool for Twitter**
DEMİRCİ M. S., SAĞIROĞLU Ş.
Journal of Universal Computer Science, vol.28, no.4, pp.345-377, 2022 (SCI-Expanded)
- II. **Design and evaluation of a controller for energy efficient security management and traffic routing in SDN/NFV based 5G networks** SDN/NFV tabanlı 5G ağlarında enerji-etkin güvenlik yönetimi ve trafik yönlendirme için kontrolcü tasarımı ve değerlendirmesi
DEMİRCİ M. S., SAĞIROĞLU Ş.
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.37, no.1, pp.1-15, 2022 (SCI-Expanded)
- III. **Energy-efficient virtual security function placement in NFV-enabled networks**
Demirci M. S., Sağiroğlu Ş., Demirci M.
SUSTAINABLE COMPUTING-INFORMATICS & SYSTEMS, vol.30, 2021 (SCI-Expanded)
- IV. **Optimal placement of virtual network functions in software defined networks: A survey**
Demirci M. S., Sağiroğlu Ş.
JOURNAL OF NETWORK AND COMPUTER APPLICATIONS, vol.147, 2019 (SCI-Expanded)

Articles Published in Other Journals

- I. **Deep Learning Based Fake News Detection on Social Media**
Güler G., Demirci M. S.
INTERNATIONAL JOURNAL OF INFORMATION SECURITY SCIENCE, vol.12, no.2, pp.1-21, 2023 (Peer-Reviewed Journal)
- II. **Virtual Security Functions and Their Placement in Software Defined Networks: A Survey**
Demirci M. S., Demirci M., Sağiroğlu Ş.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.32, no.3, pp.833-851, 2019 (Peer-Reviewed Journal)
- III. **Sosyal Ağ Verilerinin Kullanım Alanları Üzerine Kapsamlı Bir İnceleme**
Gündüz M. S., Sağiroğlu Ş.
Gazi Üniversitesi Fen Bilimleri Dergisi Part: C Tasarım ve Teknoloji, vol.5, no.2, pp.1-21, 2017 (Peer-Reviewed Journal)
- IV. **Web Uygulama Güvenliği Açıklıkları Ve Güvenlik Çözümleri Üzerine Bir Araştırma**
Aydoğdu d., GÜNDÜZ M. S.
ULUSLARARASI BİLGİ GÜVENLİĞİ MÜHENDİSLİĞİ DERGİSİ, vol.2, no.1, 2016 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Adaptive Learning in IoT-Based Smart City Applications**
Abdulla N., Demirci M. S., Demirci M., Özdemir S.
in: Principles and Applications of Adaptive Artificial Intelligence, Lv Zhihan, Editor, Idea Group Publishing (IGP) , Pennsylvania, pp.73-101, 2024
- II. **5G ve Siber Güvenlik**
Demirci M. S., Demirci M.
in: Bilişim Teknolojileri Güvenliği, Nursel Yalçın, Hüseyin Çakır, Editor, Nobel Yayınevi, Ankara, pp.1-21, 2023
- III. **Yazılım Tanımlı Ağlar ve Siber Güvenlik**
Gündüz M. S., Yürekten Ö., Demirci M.
in: Siber Güvenlik ve Savunma: Standartlar ve Uygulamalar, Şeref Sağıroğlu, Editor, Grafiker, Ankara, pp.121-152, 2019

Refereed Congress / Symposium Publications in Proceedings

- I. **Developing Explainable Intrusion Detection Systems for Internet of Things**
Çelik A. F., Sağlam B., Demirci M. S.
16th International Conference on Information Security and Cryptology, Ankara, Turkey, 18 - 19 October 2023, pp.1-6
- II. **Drone Network Security: Attack Types and Machine Learning Based Solutions**
Çakırgöz R., Demirci M. S.
8th IEEE International Conference on Computer Science and Engineering (UBMK), Burdur, Turkey, 13 - 15 September 2023, pp.352-357
- III. **DDoS Attack Aware Controller Placement in SDN**
Taşkın B., Demirci M., Demirci M. S.
8th International Congress on Engineering and Technology, İstanbul, Turkey, 8 - 10 December 2022, pp.635
- IV. **Twitter'daki Türkçe Haber Paylaşımının Derin Öğrenme Tabanlı Sınıflandırılması**
Yolcu A. B., Demirci M. S.
6. Uluslararası Bilgisayar Bilimleri ve Mühendisliği Konferansı , 15 - 17 September 2021, pp.1-6
- V. **Software-Defined Networking for Improving Security in Smart Grid Systems**
Demirci M. S., Sağıroğlu Ş.
7th International Conference on Renewable Energy Research and Applications (ICRERA), Paris, France, 14 - 17 October 2018, pp.1021-1026
- VI. **Optimal Placement of Virtual Security Functions to Minimize Energy Consumption**
Demirci M. S., Demirci M., Sağıroğlu Ş.
International Symposium on Networks, Computers and Communications (ISNCC), Rome, Italy, 19 - 21 June 2018
- VII. **An Intelligent System for Predicting Location from Text Content on Social Media**
DEMİRCİ M. S., Ozdemir S. O.
2017 International Conference on Computer Science and Engineering (UBMK), Antalya, Turkey, 5 - 08 October 2017, pp.671-676
- VIII. **Investigating sentimental relation between stress and heart disease mortality**
Tepe N. A., DEMİRCİ M. S.
2017 International Conference on Computer Science and Engineering (UBMK), Antalya, Turkey, 5 - 08 October 2017, pp.677-681
- IX. **A Review on Mobile Threats and Machine Learning Based Detection Approaches**
ARSLAN B., Gunduz S., SAĞIROĞLU Ş.
4th International Symposium on Digital Forensic and Security (ISDFS), Arkansas, United States Of America, 25 - 27 April 2016, pp.7-13
- X. **A Review of Techniques and Tools for Gathering Digital Evidence from Mobile Phones**

Bal M., Öztürk B., Yayla E., Gündüz M. S., Demirci M.

3rd International Symposium on Digital Forensics and Security, Ankara, Turkey, 11 - 12 May 2015

XI. Güncel Mobil Tehditler ve Alınması Gereken Önlemler

Arslan B., Gündüz M. S., Sağıroğlu Ş.

3rd International Symposium on Digital Forensics and Security, Ankara, Turkey, 11 - 12 May 2015

XII. A New Cyber Security Alert System for Twitter

Erkal Y., Sezgin M., Gunduz S.

IEEE 14th International Conference on Machine Learning and Applications ICMLA, Florida, United States Of America, 9 - 11 December 2015, pp.766-770

XIII. A Review of Machine Learning Solutions to Denial-of-Services Attacks in Wireless Sensor Networks

Gunduz S., Arslan B., Demirci M.

IEEE 14th International Conference on Machine Learning and Applications ICMLA, Florida, United States Of America, 9 - 11 December 2015, pp.150-155

XIV. Analyzing the Effects of Personality Traits on Facebook Use for Education A Study on University Students

Gündüz M. S., Demirhan F.

5th Annual International Conference on Computer Science Education: Information & Technology, Singapore, Singapore, 22 - 23 September 2014

XV. Investigating sentimental relation between social media presence and academic success of Turkish Universities

Gunduz S., Demirhan F., SAĞIROĞLU Ş.

13th International Conference on Machine Learning and Applications (ICMLA), Michigan, United States Of America, 3 - 06 December 2014, pp.574-579

XVI. A Novel Approach on Extracting Forensic Information from Location Based Social Networks

Yavanoğlu U., Gündüz M. S., Sağıroğlu Ş.

1st International Symposium on Digital Forensics and Security (ISDFS'13), Elazığ, Turkey, 20 - 21 May 2013

XVII. Predicting next location of Twitter users for surveillance

Gunduz S., YAVANOĞLU U., SAĞIROĞLU Ş.

12th International Conference on Machine Learning and Applications (ICMLA), Florida, United States Of America, 4 - 07 December 2013, pp.267-273

Supported Projects

SAĞIROĞLU Ş., KARA A., DEMİRCİ M. S., DENER M., DEMİRCİ M., ATAY Y., Project Supported by Higher Education Institutions, Akıllı Şebekeler için Zeki Siber Güvenlik Çözümleri Geliştirme, 2022 - Continues

Scientific Refereeing

WIRELESS PERSONAL COMMUNICATIONS, SCI Journal, February 2024

Handbook of Research on Adaptive Artificial Intelligence, Chapter Scientific / Professional Book Published by Renowned Publishing Houses, November 2023

SCIENTIFIC REPORTS, SCI Journal, September 2023

22nd International Conference on Machine Learning and Applications, Conference Paper (Full Text), September 2023

16. ULUSLARARASI BİLGİ GÜVENLİĞİ VE KRİPTOLOJİ KONFERANSI , Conference Paper (Full Text), August 2023

PLOS ONE, SCI Journal, April 2023

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, February 2023

JOURNAL OF SUPERCOMPUTING, SCI Journal, October 2022

HELIYON, SCI Journal, September 2022

ENGINEERING SCIENCE AND TECHNOLOGY-AN INTERNATIONAL JOURNAL-JESTECH, SCI Journal, June 2022

Bilişim Teknolojileri Dergisi, Other Indexed Journal, May 2022
Bilişim Teknolojileri Dergisi, Other Indexed Journal, May 2022
DIGITAL JOURNALISM, Journal Indexed in SSCI, February 2021
Journal of Yaşar University, Other Indexed Journal, June 2020

Tasks In Event Organizations

Demirci M. S., SCSN 2021 : The 10th IEEE International Workshop on Semantic Computing for Social Networks and Organization Sciences: from user information to social knowledge, Scientific Congress, United States Of America, Ocak 2022
Demirci M. S., UBMK, Scientific Congress, Turkey, Eylül 2021
Demirci M. S., The 19 th IEEE International Conference on Machine Learning and Applications, Scientific Congress, United States Of America, Aralık 2020
Demirci M. S., International Conference on Information Security and Cryptology, Scientific Congress, Ankara, Turkey, Ekim 2019
Demirci M. S., IEEE International Conference on Computer Science and Engineering , Scientific Congress, Turkey, Haziran 2019
Demirci M. S., IBIGDELFT, Scientific Congress, Turkey, Aralık 2018
Demirci M. S., International Conference on Information Security and Cryptology, Scientific Congress, Ankara, Turkey, Ekim 2018
Demirci M. S., IEEE International Conference on Computer Science and Engineering , Scientific Congress, Turkey, Haziran 2018
Demirci M. S., International Conference on Information Security and Cryptology, Scientific Congress, Ankara, Turkey, Ekim 2017
Demirci M. S., IEEE International Conference on Computer Science and Engineering , Scientific Congress, Turkey, Haziran 2017
Demirci M. S., International Conference on Information Security and Cryptology, Scientific Congress, Ankara, Turkey, Ekim 2016
Demirci M. S., IEEE International Conference on Computer Science and Engineering , Scientific Congress, Turkey, Haziran 2016
Demirci M. S., International Conference on Information Security and Cryptology, Scientific Congress, Ankara, Turkey, Ekim 2015
Demirci M. S., 3rd International Symposium on Digital Forensics and Security, Scientific Congress, Ankara, Turkey, Mayıs 2015
Demirci M. S., International Conference on Information Security and Cryptology, Scientific Congress, Ankara, Turkey, Ekim 2014

Scientific Research / Working Group Memberships

Güvenli Ve Esnek Ağlar Araştırma Grubu, Gazi University, Turkey, <https://avesis.gazi.edu.tr/arastirma-grubu/sfnet>, 2021
- Continues

Metrics

Publication: 31
Citation (WoS): 83
Citation (Scopus): 133
H-Index (WoS): 6

H-Index (Scopus): 7

Awards

Demirci M. S., Gazi Üniversitesi Endüstri ve Teknoloji Tezleri Yarışması Teşvik Ödülü, Gazi Üniversitesi, June 2015

Demirci M. S., Gazi Üniversitesi Bilim Şenliği Mansiyon Ödülü, Gazi Üniversitesi, May 2015