

Asst. Prof. ÖZGÜR ERGÜL

Personal Information

Office Phone: [+90 312 582 3310](tel:+903125823310)

Email: ergul@gazi.edu.tr

Web: <https://avesis.gazi.edu.tr/12871>

Address: ergul@gazi.edu.tr

International Researcher IDs

ScholarID: 8oS1Np8AAAAJ

ORCID: 0000-0001-9875-1168

Publons / Web Of Science ResearcherID: F-8561-2013

ScopusID: 57203103715

Yoksis Researcher ID: 156793

Biography

Ozgur Ergul received his BSc., MS. and Ph.D. degrees in electrical and electronics engineering from Hacettepe University, Middle East Technical University and Koç University, respectively. He worked in Havelsan A.Ş. first as a software engineer, then as a systems engineer. After obtaining his PhD., he worked in Çankaya University and Atılım University. He currently works in Gazi University, Faculty of Engineering, Department of Electrical-Electronics as an Assist. Prof. His research interests include next-generation wireless communications, vehicular communications, and the Internet of Things.

Education Information

Doctorate, Koc University, Institute Of Science, Elektrik Ve Elektronik Mühendisliği (Dr), Turkey 2011 - 2015

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Elektrik Ve Elektronik Mühendisliği (Yl) (Tezli), Turkey 2003 - 2006

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1992 - 1999

Foreign Languages

English, C2 Mastery

Dissertations

Doctorate, Cognitive communication techniques for next-generation heterogeneous networks, Koc University, Fen Bilimleri Enstitüsü, Elektrik Ve Elektronik Mühendisliği (Dr), 2015

Postgraduate, A wavelength selectable WDM source using a fiber sagnac loop filter, Middle East Technical University, Analiz ve Fonksiyonlar Teorisi, Elektrik Ve Elektronik Mühendisliği (Yl) (Tezli), 2006

Research Areas

Academic Titles / Tasks

Assistant Professor, Gazi University, Mühendislik Fakültesi, Elektrik - Elektronik Mühendisliği, 2020 - Continues

Assistant Professor, Atilim University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering, 2019 - 2020

Assistant Professor, Cankaya University, Faculty Of Engineering, Department Of Electronics And Communications Engineering, 2016 - 2020

Research Assistant, Van Yüzüncü Yıl University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2003 - 2004

Academic and Administrative Experience

Cankaya University, Mühendislik Fakültesi, Elektronik Ve Haberleşme Mühendisliği Bölümü, 2018 - 2020

Courses

Information and Coding Theory, Postgraduate, 2022 - 2023

Digital Communication, Undergraduate, 2022 - 2023

Data Structures, Undergraduate, 2022 - 2023

Communication Theory, Postgraduate, 2022 - 2023

Digital Communication, Undergraduate, 2021 - 2022

Detection Estimation and Modulation Theory, Undergraduate, 2017 - 2018, 2016 - 2017

Wireless Sensor Networks, Postgraduate, 2017 - 2018, 2016 - 2017

Cognitive Radio Networks, Postgraduate, 2017 - 2018

Microprocessors, Undergraduate, 2017 - 2018

Digital Design II, Undergraduate, 2017 - 2018

Fundamentals of Communication, Undergraduate, 2017 - 2018

Introduction to Telecommunication Networks, Undergraduate, 2017 - 2018, 2016 - 2017

Telecommunication Networks, Undergraduate, 2016 - 2017

Digital Design II, Undergraduate, 2016 - 2017

Electronics II, Undergraduate, 2016 - 2017

Advising Theses

Ergül Ö., Power Amplifier Module Gain Calibration Based on Deep Learning, Postgraduate, A.BUĞRA(Student), 2023

Ergül Ö., Wiggly Line Coupler Design, Postgraduate, E.ÇUKUR(Student), 2022

ERGÜL Ö., Improvement of range resolution in passive bistatic radar using fm signals, Postgraduate,

M.ALSUDANI(Student), 2020

ERGÜL Ö., Comparison of consensus algorithms in wireless sensor networks, Postgraduate, A.SULAIMAN(Student), 2019

ERGÜL Ö., Resource allocation for underlay cognitive radio networks, Postgraduate, M.HATEM(Student), 2019

ERGÜL Ö., Comparison of indoor positioning techniques using visible light communication, Postgraduate,

A.ADNAN(Student), 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Detection of cyber-attacks on smart grids using improved VGG19 deep neural network architecture and Aquila optimizer algorithm**
Mhmood A. A., ERGÜL Ö., Rahebi J.
Signal, Image and Video Processing, vol.18, no.2, pp.1477-1491, 2024 (SCI-Expanded)
- II. **Rescue: Wireless power-enabled communication architecture for earthquake rescue operations**
Badirkhanli O., Akan O. B., Ergul Ö.
PHYSICAL COMMUNICATION, vol.38, 2020 (SCI-Expanded)
- III. **Spectrum-Aware and Energy-Adaptive Reliable Transport for Internet of Sensing Things**
Bicen A. O., ERGÜL Ö., Akan O. B.
IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, vol.67, no.3, pp.2359-2366, 2018 (SCI-Expanded)
- IV. **Throughput maximization in electromagnetic energy harvesting cognitive radio sensor networks**
ERGÜL Ö., Alagoz F., Akan O. B.
INTERNATIONAL JOURNAL OF COMMUNICATION SYSTEMS, vol.29, no.7, pp.1305-1322, 2016 (SCI-Expanded)
- V. **Opportunistic reliability for cognitive radio sensor actor networks in smart grid**
ERGÜL Ö., Bicen A. O., Akan O. B.
AD HOC NETWORKS, vol.41, pp.5-14, 2016 (SCI-Expanded)
- VI. **Adaptive and Cognitive Communication Architecture for Next-Generation PPDR Systems**
ERGÜL Ö., Shah G. A., Canberk B., Akan O. B.
IEEE COMMUNICATIONS MAGAZINE, vol.54, no.4, pp.92-100, 2016 (SCI-Expanded)
- VII. **Communicate to illuminate: State-of-the-art and research challenges for visible light communications**
ERGÜL Ö., Dinc E., Akan O. B.
PHYSICAL COMMUNICATION, vol.17, pp.72-85, 2015 (SCI-Expanded)
- VIII. **Cognitive Radio Sensor Networks**
Akan O. B., Karli O. B., ERGÜL Ö.
IEEE NETWORK, vol.23, no.4, pp.34-40, 2009 (SCI-Expanded)

Articles Published in Other Journals

- I. **Information theoretic modeling of paranodal regions in myelinated axons**
Koca C., Ergül Ö., Civas M., Akan Ö. B.
ITU JOURNAL ON FUTURE AND EVOLVING TECHNOLOGIES, vol.2, no.3, pp.101-110, 2021 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Routing in Cognitive Vehicular Networks**
ERGÜL Ö., AKAN Ö. B.
in: Cognitive Vehicular Networks, Vegni Anna Maria, Agrawal Dharma P., Editor, CRC Press, pp.112-125, 2018
- II. **Cognitive Radio Sensor Networks in Smart Grid**
ERGÜL Ö., cetinkaya o., AKAN Ö. B.
in: Smart Grid: Networking, Data Management, and Business Models, Mouftah Hussein T., Erol-Kantarci Melike, Editor, CRC Press, pp.29-51, 2018

Refereed Congress / Symposium Publications in Proceedings

- I. **Derin Öğrenme Tabanlı Güç Yükselteç Modülü Kazanç Kalibrasyonu**
Uğur A. B., Ergül Ö.
The International Cumhuriyet Artificial Intelligence Applications Conference, Sivas, Turkey, 8 - 09 December 2022, pp.39-43

II. DALGALI HAT KUPLÖR TASARIMI

Çukur E., Ergül Ö.

7. ULUSLARARASI MÜHENDİSLİK VE TEKNOLOJİ YÖNETİMİ KONGRESİ, İstanbul, Turkey, 16 - 18 April 2022, pp.632-639

III. Soft Handover in OFDMA Based Visible Light Communication Networks

Dinc E., ERGÜL Ö., AKAN Ö. B.

2015 IEEE 82nd Vehicular Technology Conference (VTC2015-Fall), Boston, MA, USA, 6 - 09 September 2015

IV. Cooperative coarse spectrum sensing for cognitive radio sensor networks

Ergül Ö., Akan Ö. B.

2014 IEEE Wireless Communications and Networking Conference (WCNC), İstanbul, Turkey, 6 - 09 April 2014

V. DRX and QoS-aware energy-efficient uplink scheduling for long term evolution

ERGÜL Ö., Yılmaz O., Koc A. T., AKAN Ö. B.

2013 IEEE Global Communications Conference (GLOBECOM), Atlanta, GA, United States Of America, 9 - 13 December 2013, pp.4644-4649

VI. Energy-efficient cooperative spectrum sensing for cognitive radio sensor networks

ERGÜL Ö., AKAN Ö. B.

2013 IEEE Symposium on Computers and Communications (ISCC), Split, Croatia, 7 - 10 July 2013

Metrics

Publication: 19

Citation (WoS): 508

Citation (Scopus): 640

H-Index (WoS): 6

H-Index (Scopus): 7

Non Academic Experience

Company, Havelsan A.Ş., Bilgi Güvenliği