

## Assoc. Prof. CEMAL KOÇAK

### Personal Information

Office Phone: [+90 0312 202 8569](tel:+9003122028569)

Email: [ccckocak@gazi.edu.tr](mailto:ccckocak@gazi.edu.tr)

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

### International Researcher IDs

ORCID: 0000-0002-8902-0934

ScopusID: 57193846821

Yoksis Researcher ID: 106776

### Education Information

Doctorate, Sakarya University, Institute Of Science, Elektrik, Elektronik Mühendisliği (Dr), Turkey 1998 - 2005

Postgraduate, Kütahya Dumlupınar University, Fen Bilimleri Enstitüsü, Elektronik Eğitimi (YI), Turkey 1994 - 1996

Undergraduate, Gazi University, Teknik Eğitim Fakültesi, Elektronik Ve Bilgisayar Eğitimi Bölümü, Turkey 1988 - 1993

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, ATM ve LMDS ağlarda MPLS kullanarak servis kalitesi desteği sağlanmış gerçek zamanlı veri transferi, Sakarya University, Fen Bilimleri Enstitüsü, Elektrik, Elektronik Mühendisliği (Dr), 2004

Postgraduate, Sincap kafesli asenkron motorların hız kontrolünün tasarımı ve uygulaması, Kütahya Dumlupınar University, Fen Bilimleri Enstitüsü, Elektronik Eğitimi (YI), 1996

### Research Areas

Computer Sciences, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Gazi University, Teknoloji Fakültesi, Bilgisayar Mühendisliği Bölümü, 2012 - Continues

Assistant Professor, Kütahya Dumlupınar University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2009 - 2011

### Academic and Administrative Experience

Deputy Head of Department, Gazi University, Teknoloji Fakültesi, Bilgisayar Mühendisliği Bölümü, 2016 - 2018

## Advising Theses

- KOÇAK C., Performance Evaluation With Using Analytic Method In Mac Layer For Wireless Local Area Networks, Doctorate, H.Bayram(Student), 2021
- KOÇAK C., Analysis And Synthesis Of Mobile Ipv6 Based Routing Optimization Schemes For Mobile Networks, Doctorate, M.M.(Student), 2020
- KOÇAK C., Mobil ağlar için mobil IPv6 tabanlı yönlendirme optimizasyon şemasının analizi ve sentezi tespiti, Doctorate, M.MOHAMEDİ(Student), 2020
- KOÇAK C., Türkiye'deki kamu kurumlarının android uygulamalarının güvenlik zafiyetlerinin analizi, Postgraduate, K.EMRE(Student), 2019
- KOÇAK C., Performance analysis of ip networks using two-way active measurement protocol (Twamp), Postgraduate, K.ZAİM(Student), 2017
- KOÇAK C., Performance Evaluation Of Tunneling Mechanism In Mıpv6 Over Ipv4, Postgraduate, A.ALI(Student), 2017
- KOÇAK C., Rts/Cts Mechanism'S Effect On Performance In Wireless Network Applications, Postgraduate, B.BORSUK(Student), 2016
- KOÇAK C., Kablosuz yerel alan ağlarında kontrol fonksiyonları için parçalama eşik değeri ile performans geliştirme, Postgraduate, H.BAYRAM(Student), 2015

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

- I. **Increasing quality of service in wireless local area networks through fuzzy logic based feedback control method**  
Karakurt H. B., KOÇAK C.  
Wireless Networks, vol.29, no.5, pp.2217-2233, 2023 (SCI-Expanded)
- II. **Optimized Routing by Combining Grey Wolf and Dragonfly Optimization for Energy Efficiency in Wireless Sensor Networks**  
Younus H. A., Koçak C.  
APPLIED SCIENCES-BASEL, vol.12, no.21, 2022 (SCI-Expanded)
- III. **Prediction of Channel Utilization with Artificial Neural Networks Model in Mac Layer in Wireless Local Area Networks**  
Karakurt H. B., KOÇAK C., ÖZKAN M. T.  
WIRELESS PERSONAL COMMUNICATIONS, vol.126, no.4, pp.3389-3418, 2022 (SCI-Expanded)
- IV. **Recognition of DDoS attacks on SD-VANET based on combination of hyperparameter optimization and feature selection**  
Turkoglu M., POLAT H., KOÇAK C., POLAT O.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.203, 2022 (SCI-Expanded)
- V. **LAN Intrusion Detection Using Convolutional Neural Networks**  
Zainel H., KOÇAK C.  
APPLIED SCIENCES-BASEL, vol.12, no.13, 2022 (SCI-Expanded)
- VI. **Fuzzy logic-based performance improvement on MAC layer in wireless local area networks**  
KOÇAK C., Karakurt H. B.  
NEURAL COMPUTING & APPLICATIONS, vol.31, no.10, pp.6113-6128, 2019 (SCI-Expanded)
- VII. **CLSM: COUPLE LAYERED SECURITY MODEL A HIGH-CAPACITY DATA HIDING SCHEME USING WITH STEGANOGRAPHY**  
KOÇAK C.  
IMAGE ANALYSIS & STEREOLOGY, vol.36, no.1, pp.15-23, 2017 (SCI-Expanded)
- VIII. **MPLS over ATM and IP over ATM methods for multimedia applications**  
Kocak C., Erturk I., Ekiz H.  
COMPUTER STANDARDS & INTERFACES, vol.31, no.1, pp.153-160, 2009 (SCI-Expanded)

## Articles Published in Other Journals

- I. **FA-AODV: Flooding Attacks Detection Based Ad Hoc On-Demand Distance Vector Routing Protocol for VANET**  
Tosunoğlu B. A., KOÇAK C.  
Sakarya University Journal of Computer and Information Sciences (Online), vol.5, no.3, pp.304-314, 2022 (Peer-Reviewed Journal)
- II. **Detection of SSL/TLS Implementation Errors in Android Applications**  
Cibalık K. E., KOÇAK C.  
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.8, no.2, pp.211-219, 2021 (Peer-Reviewed Journal)
- III. **Kablosuz Yerel Alan Ağlarında Kanal Kullanımının MAC Katmanında Döngü Tablosu ile Artırılması**  
Karakurt H. B., KOÇAK C.  
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.8, no.3, pp.542-560, 2020 (Peer-Reviewed Journal)
- IV. **Evaluation of Route Optimization Method in Mobile IPv6 Networks**  
KOÇAK C., MJAHIDI M. M.  
Sakarya University Journal of Science, vol.23, no.6, pp.1207-1217, 2019 (Peer-Reviewed Journal)
- V. **Data Traffic Optimization in Wireless Local Area Networks with Artificial Neural Networks**  
KOÇAK C., Karakurt H. B.  
JOURNAL OF POLYTECHNIC-POLITEKNİK DERGİSİ, vol.22, no.3, pp.737-747, 2019 (ESCI)
- VI. **Encrypted Data Transmission Model For Ethernet LANs**  
KOÇAK C., Durak M.  
Sakarya University Journal of Science, vol.23, no.4, pp.641-649, 2019 (Peer-Reviewed Journal)
- VII. **Kablosuz Ağlarda Çok Katmanlı Güvenlik ve Performansa Etkisi**  
Karakurt H. B., KOÇAK C., DOĞRU İ. A.  
Karaelmas Fen ve Mühendislik Dergisi, vol.8, no.1, pp.126-137, 2018 (Peer-Reviewed Journal)
- VIII. **Performance Evaluation of Tunneling Mechanism in MIPv6 over IPv4**  
KOÇAK C., KWIZERA A. A.  
BİLİŞİM TEKNOLOJİLERİ DERGİSİ, vol.10, no.3, pp.327-334, 2017 (Peer-Reviewed Journal)
- IX. **Kablosuz Ağlarda Gizli Düğüm Probleminde IEEE 802.11 MAC Katmanı RTS/CTS Mekanizmasının Çoklu Ortam Uygulamalarında Performansa Etkisi**  
BORSUK B., KOÇAK C.  
Bilişim Teknolojileri Dergisi, vol.9, no.2, pp.187-195, 2016 (Peer-Reviewed Journal)
- X. **Kriptografi ve stenografi yöntemlerini birlikte kullanarak yüksek güvenli veri gizleme**  
KOÇAK C.  
Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.31, no.2, pp.115-123, 2015 (Peer-Reviewed Journal)
- XI. **RISK DETERMINED OF MOTOR OWN DAMAGE INSURANCE BY POLICIES USING ARTIFICIALINTELLIGENCE**  
Yelken F., Gülbandılar E., Dalkılıç N., KOÇAK C.  
Dumlupınar Üniversitesi Sosyal Bilimler Dergisi, no.43, pp.180-183, 2015 (Peer-Reviewed Journal)

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **KAMU KURUMLARININ ANDROID UYGULAMALARININ GÜVENLİK ZAFİYETLERİNİN İNCELENMESİ**  
Cibalık K. E., KOÇAK C.  
7th International Symposium on Academic Studies in Science, Engineering and Architecture Sciences, Ankara, Turkey, 15 - 17 November 2019, pp.24-36
- II. **Çoklu Bulut Servis Sağlayıcıları Üzerinde Kubernetes Platformu Kullanılarak Sunucusuz Mimari Geliştirilmesi**  
KOÇAK C., YARDIMCI F.  
4th International Scientific Research Congress (IBAD-2019) Proceedings, Uppsala, Sweden, 25 - 26 April 2019,

pp.42-51

- III. **A New Distance Energy Aware Algorithm for Improve Consuming Energy in Wireless Sensor Network**  
KOÇAK C., Naghibzadeh S.  
2 nd International Maditerranean Science and Engineering Congress, Adana, Turkey, 25 - 27 October 2017, pp.1126
- IV. **Performance measurement of IP networks using Two-Way Active Measurement Protocol**  
Zaim K., KOÇAK C.  
2017 8th International Conference on Information Technology (ICIT), Amman, Jordan, 17 - 18 May 2017
- V. **Visions and Demands for 5G Multi-Tier Cellular Networks**  
POLAT H., MEHR H. D., KOÇAK C.  
International Congress on Applied Science and Technology, Malaga, Spain, 17 - 20 April 2017
- VI. **Proposal of a New Protocol Against Blackhole Attack in AODV Networks**  
KOÇAK C., POLAT H., TOSUNOĞLU B. A., ŞAHİN Ö.  
International Congress on Applied Science and Technology, Malaga, Spain, 17 - 20 April 2017
- VII. **Performance Analysis of IP Network Using Two Way Active Measurement Protocol TWAMP and Comparison with ICMP Ping Protocol in a Saturated Condition**  
ZAIM K., KOÇAK C.  
4th Internattionall Symposiium on Innovattiive Technollogiies iinEngiineeriing and Science, Alanya/Antalya, Turkey, 3 - 05 November 2016, pp.1618-1627
- VIII. **Kablosuz Yerel Alan Ağlarında PCF DCF ve Gelişmiş DCF EDCF Fonksiyonlarında Farklı Parçalama Eşik Değerlerinin Performansa Etkisi**  
KOÇAK C.  
Akademik Bilisim 2015 Konferansı, Eskişehir, Turkey, 4 - 06 February 2015
- IX. **YEREL ÇOK NOKTALI DAĞITIM SİSTEMİ LOCAL MULTIPOINT DISTRIBUTION SYSTEM LMDS**  
KOÇAK C.  
Akademik Bilişim'07, Kütahya, Turkey, 31 January - 02 February 2007
- X. **ATM AĞLARDA LMDS KULLANARAK GERÇEK ZAMANLI ÇOKLU ORTAM UYGULAMASI**  
KOÇAK C., EKİZ H.  
4. Uluslararası İleri Teknolojiler Sempozyumu, Konya, Turkey, 28 - 30 September 2005, pp.49-54

## Metrics

Publication: 31

Citation (WoS): 34

Citation (Scopus): 42

H-Index (WoS): 3

H-Index (Scopus): 3

## Non Academic Experience

Michigan State University