

## Lect. PhD AHMET KARAKÜÇÜK

### Personal Information

Office Phone: [+90 224 294 0646](tel:+902242940646)

Email: [akarakucuk@uludag.edu.tr](mailto:akarakucuk@uludag.edu.tr)

Web: <https://avesis.uludag.edu.tr/akarakucuk>

### International Researcher IDs

ScholarID: Aj5mW2sAAAAJ

ORCID: 0000-0002-3175-6041

Publons / Web Of Science ResearcherID: A-1996-2017

ScopusID: 56008029100

Yoksis Researcher ID: 33096

### Education Information

Doctorate, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, FEN BİLİMLERİ ENSTİTÜSÜ, Turkey 2012 - 2021

Postgraduate, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, FEN BİLİMLERİ ENSTİTÜSÜ, Turkey 2009 - 2012

Undergraduate, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, Electronic Engineering, Turkey 2004 - 2009

### Foreign Languages

English, C2 Mastery

### Certificates, Courses and Trainings

IT, NVIDIA DLI Certificate – Applications of AI for Anomaly Detection, Nvidia Deep Learning Institute, 2022

IT, NVIDIA DLI Certificate – Fundamentals of Deep Learning, NVIDIA Deep Learning Institute, 2022

### Dissertations

Doctorate, ADVANCED METHODS FOR SOURCE AUTHENTICATION AND ATTRIBUTION IN DIGITAL FORENSICS, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, FEN BİLİMLERİ ENSTİTÜSÜ, 2021

Postgraduate, Laplace gürültülü ikili veri haberleşmesinde işaret genliğinin kestirimi, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, Elektronik Mühendisliği (YI) (Tezli), 2012

### Research Areas

Signal Processing, Multimedia, Image and Video Processing, Signal Processing for Communication, Pattern Recognition and Analysis, Signal Processing Theory and Methods, Information Security and Reliability, Hiding Information, Electrical and Electronics Engineering

### Academic Titles / Tasks

Lecturer PhD, Bursa Uludağ University, GEMLİK ASIM KOCABIYIK MYO, ELEKTRİK VE ENERJİ BÖLÜMÜ, 2021 - 2025  
Research Assistant, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, FEN BİLİMLERİ ENSTİTÜSÜ, 2012 - 2021  
Researcher, New York University, Center for Cyber Security, 2016 - 2016  
Researcher, New York University, Center for Cyber Security, 2014 - 2014  
Research Assistant, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, FEN BİLİMLERİ ENSTİTÜSÜ, 2009 - 2012

## Academic and Administrative Experience

Academic Performance D. Board Member, Bursa Uludağ University, Gemlik Asım Kocabiyik Myo, 2023 - Continues  
Performance Evaluation Commission Member, Bursa Uludağ University, Gemlik Asım Kocabiyik Myo, 2023 - Continues  
Curriculum Preparation Committee Member, Bursa Uludağ University, Gemlik Asım Kocabiyik Myo, 2023 - Continues  
Member of Unit Quality Commission, Bursa Uludağ University, Gemlik Asım Kocabiyik Myo, 2022 - Continues  
Department Academic Incentive Evaluation Commission Member, Bursa Uludağ University, Gemlik Asım Kocabiyik Myo, 2022 - Continues  
College Management Board Member, Bursa Uludağ University, Gemlik Asım Kocabiyik Myo, 2022 - Continues  
Assistant Director of Vocational School, Bursa Uludağ University, Gemlik Asım Kocabiyik Myo, 2022 - 2025

## Courses

ALTERNATİF AKIM DEVRE ANALİZİ, Associate Degree, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022  
ALTERNATİF AKIM DEVRE ANALİZİ, Associate Degree, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022  
OTOMOTİV ELEKTRONİĞİ, Associate Degree, 2024 - 2025, 2023 - 2024, 2022 - 2023  
STAJ 1, Associate Degree, 2024 - 2025, 2023 - 2024  
İŞYERİ EĞİTİMİ I, Associate Degree, 2024 - 2025, 2023 - 2024  
ARAÇ HABERLEŞME TEKNOLOJİLERİ, Associate Degree, 2024 - 2025, 2023 - 2024  
TEMEL ELEKTRİK ELEKTRONİK, Associate Degree, 2024 - 2025, 2023 - 2024, 2022 - 2023  
ELEKTRONİK DEVRELERDE ÖLÇME TAMİR VE BAKIMI, Associate Degree, 2024 - 2025, 2023 - 2024  
TEMEL ELEKTRİK, Associate Degree, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022  
KARİYER PLANLAMA, Associate Degree, 2024 - 2025, 2023 - 2024  
DOĞRU AKIM DEVRE ANALİZİ, Associate Degree, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022  
DOĞRU AKIM DEVRE ANALİZİ, Associate Degree, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022  
İŞYERİ EĞİTİMİ II, Associate Degree, 2022 - 2023  
ÖZEL TESİSAT, Associate Degree, 2021 - 2022  
TEMEL MATEMATİK, Associate Degree, 2022 - 2023, 2021 - 2022  
DALGACIK DÖNÜŞÜMÜ ve ÇOK ÖLÇEKLİ ANALİZ, Undergraduate, 2021 - 2022  
ÖZEL TESİSAT, Associate Degree, 2021 - 2022  
TRAFO VE DOĞRU AKIM MAKİNALARI, Associate Degree, 2021 - 2022  
DALGACIK DÖNÜŞÜMÜ ve ÇOK ÖLÇEKLİ ANALİZ, Undergraduate, 2021 - 2022  
TRAFO VE DOĞRU AKIM MAKİNALARI, Associate Degree, 2021 - 2022  
MANTIK DEVRELERİ, Undergraduate, 2022 - 2023  
ASENKRON VE SENKRON MAKİNALARI, Associate Degree, 2021 - 2022  
ASENKRON VE SENKRON MAKİNALARI, Associate Degree, 2021 - 2022  
TESİSAT BİLGİSİ, Associate Degree, 2021 - 2022  
Bilgisayar Programlamaya Giriş Laboratuvarı, Undergraduate, 2017 - 2018, 2016 - 2017  
Elektrik-Elektronik Mühendisleri için Bilgisayar Araçları Laboratuvarı, Undergraduate, 2017 - 2018, 2016 - 2017  
ELEKTRONİK DEVRELERİ I LABORATUVARI, Undergraduate, 2017 - 2018

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

- I. **PRNU based source camera attribution for image sets anonymized with patch-match algorithm**  
KARAKÜÇÜK A., DİRİK A. E.  
DIGITAL INVESTIGATION, vol.30, pp.43-51, 2019 (SCI-Expanded)
- II. **Evaluation of electromagnetic shielding effectiveness of fabrics produced from yarns containing metal wire with a mobile based measurement system**  
ÇEVEN E. K., KARAKÜÇÜK A., DİRİK A. E., YALÇIN U.  
INDUSTRIA TEXTILA, vol.68, no.4, pp.289-295, 2017 (SCI-Expanded)
- III. **Adaptive photo-response non-uniformity noise removal against image source attribution**  
KARAKÜÇÜK A., DİRİK A. E.  
DIGITAL INVESTIGATION, vol.12, pp.66-76, 2015 (SCI-Expanded)
- IV. **Forensic use of photo response non-uniformity of imaging sensors and a counter method**  
Dirik A. E., Karaküçük A.  
OPTICS EXPRESS, vol.22, no.1, pp.470-482, 2014 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Source Device Attribution of Thermal Images Captured with Handheld IR Cameras**  
KARAKÜÇÜK A., DİRİK A. E.  
11th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 28 - 30 November 2019, pp.547-551
- II. **A New Evaluation Method for Electromagnetic Shielding Effectiveness in Textiles**  
Çeven E. K., Karaküçük A., Dirik A. E., Yalçin U.  
UTİB Tekstil ve Konfeksiyon Sektöründe VIII. Uluslararası AR-GE Proje Pazarı, Bursa, Turkey, 12 - 13 May 2016, pp.171-172
- III. **Recent Advances in Counter PRNU Based Source Attribution and Beyond**  
Karaküçük A., Dirik A. E., Sencar H. T., Memon N. D.  
Conference on Media Watermarking, Security, and Forensics, San-Francisco, Costa Rica, 9 - 11 February 2015, vol.9409

## Supported Projects

Memon N., Lowd D., Karaküçük A., Divakaran A., Project Supported by Public Organizations in Other Countries, Media Forensics Integrity Analytics, Defense Advanced Research Projects, 2016 - 2017

Dirik A. E., TUBİTAK Project, Anonymization of Digital Images Against Source Camera Attribution, TUBİTAK 1002 , 2013 - 2014

## Patent

Dirik A. E., Karaküçük A., PANORAMA FOTOĞRAFLARINDAN KAYNAK KAMERA SENSÖRÜ PARMAK İZİ ÜRETİMİ YÖNTEMİ, Patent, CHAPTER A Human Needs, The Invention Registration Number: 2021/018005 , Standard Registration, 2022

Karaküçük A., Dirik A. E., Source Camera Sensor Fingerprint Generation Method From Panorama Images, Patent, CHAPTER G Physics, The Invention Recourse Number: PCT/TR2021051391 , Standard Registration, 2023, 2021

Karaküçük A., Dirik A. E., Anonymization system and method for digital images, Patent, CHAPTER G Physics, The Invention Registration Number: US10297011B2 , Standard Registration, 2019

Dirik A. E., Karaküçük A., Anonymization system and method for digital images, Patent, CHAPTER G Physics, The Invention Registration Number: 2013 04116 , Standard Registration, 2016

Dirik A. E., Karaküçük A., ANONYMIZATION SYSTEM AND METHOD FOR DIGITAL IMAGES - , Patent, CHAPTER A Human

Needs, The Invention Recourse Number: EP2981930 (A2) , Standard Registration, 2014

## Scientific Refereeing

REMOTE SENSING, SCI Journal, June 2024  
REMOTE SENSING, SCI Journal, March 2024  
REMOTE SENSING, SCI Journal, January 2024  
REMOTE SENSING, SCI Journal, December 2023  
REMOTE SENSING, SCI Journal, November 2023  
REMOTE SENSING, SCI Journal, November 2023  
APPLIED SCIENCES, SCI Journal, October 2023  
REMOTE SENSING, SCI Journal, October 2023  
REMOTE SENSING, SCI Journal, September 2023  
REMOTE SENSING, SCI Journal, August 2023  
APPLIED SCIENCES, SCI Journal, January 2023  
IEEE TRANSACTIONS ON INFORMATION FORENSICS AND SECURITY, SCI Journal, January 2023  
SENSORS, SCI Journal, December 2022  
ALGORITHMS, SCI Journal, November 2022  
SENSORS, SCI Journal, November 2022  
APPLIED SCIENCES, SCI Journal, October 2022  
IET RADAR, SONAR AND NAVIGATION, SCI Journal, November 2018

## Metrics

Publication: 8  
Citation (WoS): 74  
Citation (Scopus): 98  
H-Index (WoS): 4  
H-Index (Scopus): 4

## Awards

Dirik A. E., Karaküçük A., National Patent Registration Award, Tübitak, February 2021  
Dirik A. E., Karaküçük A., 4th Istanbul International Inventions Fair (ISIF'19) Bronze Medal, Türk Patent Ve Marka Kurumu, September 2019  
Dirik A. E., Karaküçük A., 3rd TET R&D Project Market, Information and Communication Technology Applications, Second Prize, Elektrik Elektronik Ve Hizmet Ihracatçılar Birliği, March 2014

## Non Academic Experience

TEMSAN AŞ