

Asst. Prof. Emin Kuğu

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAO-4105-2020

ScopusID: 35213540200

Yoksis Researcher ID: 243665

Biography

Dr. Emin Kuğu received his bachelor's degree from Istanbul University Computer Science Engineering Department, his master's degree from the Air Force Academy of Aeronautics and Space Technologies Institute Software Engineering, and his doctorate from Old Dominion University Electrical and Computer Engineering program.

In addition to being a faculty member of the Department of Computer Engineering of the Air Force Academy, he worked as a part-time lecturer at different universities located in Istanbul and Ankara. He worked as a project manager in the Turkish Air Force Command Information System (HvBS) project and worked in software development processes of international defense projects.

He has been working as a professor at TEDU in the Software Engineering Department as of May 2020.

Education Information

Doctorate, Old Dominion University, Batten College of Engineering and Technology, United States Of America 2006 - 2011

Postgraduate, Turkish Air Force Academy, Aeronautics and Space Technologies Institute, Turkey 2003 - 2005

Undergraduate, Istanbul University, Computer Science Engineering, Turkey 1992 - 1996

Foreign Languages

English, C2 Mastery

Dissertations

Doctorate, Design of Multi Agent Based Crowd Injury Model, Old Dominion University, Frank Batten College of Engineering & Technology, Department of Electrical and Computer Engineering, 2011

Postgraduate, ORACLE OLAP (ON-LINE ANALYTICAL PROCESSING) TEKNOLOJİSİ KULLANILARAK BİR FİLODAKİ FAAL UÇAK SAYISININ UÇUŞ SAATLERİNE ETKİLERİNİN GÖZLEMLENMESİ, National Defense University, Hezarfen Institute Of Aeronautics And Astronautics, Department Of Computer Engineering, 2005

Research Areas

Computer Sciences, Information Security and Reliability, Cryptography, Software Security, Computer Networks, Communications and Network Protocols, Database and Data Structures, Data Structures, Database Systems, Fuzzy Sets and Systems, Neural Networks, Software, Software Engineering

Academic Titles / Tasks

Other, Faculty of Engineering, Software Engineering, 2020 - Continues
Other, Faculty of Engineering, Computer Engineering, 2020 - 2020
Assistant Professor, Air War Academy Command, Air Force Academy (Dean's Office), 2014 - 2017
Lecturer PhD, Air War Academy Command, Air Force Academy (Dean's Office), 2011 - 2014
Lecturer, Air War Academy Command, Air Force Academy (Dean's Office), 2005 - 2011

Academic and Administrative Experience

Fakülte Yatay Geçiş Komisyonu Üyesi, TED University, Faculty Of Engineering, Department Of Software Engineering, 2023 - 2023
Head of Department, TED University, Faculty Of Engineering, Department Of Software Engineering, 2021 - 2023
Erasmus Program Department Coordinator, TED University, Faculty Of Engineering, Department Of Software Engineering, 2020 - 2021
Program Director, TEDU Graduate School, Interactive Computing and Information Systems Mater Program, 2020 - 2020
Enstitü Yönetim Kurulu Üyesi, National Defense University, Institute Of Aviation And Space Technologies, 2015 - 2017
Erasmus Program Institutional Coordinator Assistant, National Defense University, Air Force Academy (Dean's Office), 2012 - 2017
Erasmus Program Department Coordinator, National Defense University, Air Force Academy (Dean's Office), 2012 - 2017

Courses

Network Security, Postgraduate
Network Security, Undergraduate, 2022 - 2023
Software Engineering, Undergraduate, 2022 - 2023
Fundamentals of Programming I, Undergraduate, 2021 - 2022, 2020 - 2021
Software Engineering, Undergraduate, 2022 - 2023, 2021 - 2022
Computer Networks, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021
Fundamentals of Programming I, Undergraduate, 2021 - 2022
Fundamentals of Programming II, Undergraduate, 2020 - 2021
Information Security and Cryptography, Undergraduate, 2020 - 2021
Relational Databases, Undergraduate, 2020 - 2021
Fundamentals of Programming I, Undergraduate, 2019 - 2020, 2017 - 2018
Computer Networks, Undergraduate, 2019 - 2020
Information Security and Cryptography, Undergraduate, 2018 - 2019
Software Engineering, Undergraduate, 2018 - 2019

Jury Memberships

Competition, Türkiye İhracatçılar Meclisi İnovaTİM İnovasyon Yarışması, Türkiye İhracatçılar Meclisi, September, 2024

Competition, Genç Beyinler Yeni Fikirler Bitirme Projesi Yarışması, Ostim Teknik Üniversitesi, May, 2024
Competition, Türkiye İhracatçılar Meclisi İnovaTİM İnovasyon Yarışması, Türkiye İhracatçılar Meclisi, November, 2023
Competition, Genç Beyinler Yeni Fikirler Bitirme Projesi Yarışması, TED Üniversitesi, June, 2023
Competition, Genç Beyinler Yeni Fikirler Bitirme Projesi Yarışması, Ankara Üniversitesi, June, 2022
June, 2020

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **DEPHIDES: Deep Learning Based Phishing Detection System**
Sahingoz O. K., Buber E., Kuğu E.
IEEE Access, vol.12, pp.8052-8070, 2024 (SCI-Expanded)
- II. **Fuzzy logic approach and sensitivity analysis for agent-based crowd injury modeling**
Kuğu E., Li J., Mckenzie F. D.
SIMULATION, vol.90, no.3, pp.320-336, 2014 (SCI-Expanded)

Articles Published in Other Journals

- I. **Geo-Location Spoofing on E-Scooters; Threat Analysis and Prevention Framework**
Yılmaz A. S., Çukurtepe H., Kuğu E.
Balkan Journal of Electrical and Computer Engineering, vol.11, no.4, pp.364-372, 2023 (Peer-Reviewed Journal)
- II. **A multi agent solution for UAV path planning problem with NetLogo**
Calik S. K., Kuğu E., Birtane S., Sahingoz O. K.
International Journal of Applied Engineering Research, vol.11, no.15, pp.8397-8401, 2016 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **Analysis of Location Spoofing Threats on E-Scooter Sharing E-Scooter Paylaşım Sistemi'nde Konum Yaniltma Tehditlerinin Analizi**
Yılmaz A. S., Çukurtepe H., Kuğu E.
30th Signal Processing and Communications Applications Conference, SIU 2022, Safranbolu, Turkey, 15 - 18 May 2022
- II. **Analysis and Comparison of Honeypot Activities on Two ISP Networks**
Yener D., Ozyer T., Kuğu E.
2nd International Informatics and Software Engineering Conference, IISEC 2021, Ankara, Turkey, 16 - 17 December 2021
- III. **A survey on anti-forensics techniques**
Gül M., Kuğu E.
2017 International Artificial Intelligence and Data Processing Symposium, IDAP 2017, Malatya, Turkey, 16 - 17 September 2017
- IV. **Finding smoothness area on the topographic maps for the unmanned aerial vehicle's landing site estimation**
Aydin M., Kuğu E.
6th International Conference on Digital Information and Communication Technology and Its Applications, DICTAP 2016, Konya, Turkey, 21 - 23 July 2016, pp.183-186
- V. **Safe landing site detection using SRTM data for the Unmanned Aerial Vehicles İnsansız Hava Araçları için Srtm Verisi Kullanılarak Uygun İnis Alaninin Tespit Edilmesi**
Aydin M., Kuğu E.
24th Signal Processing and Communication Application Conference, SIU 2016, Zonguldak, Turkey, 16 - 19 May

2016, pp.2125-2128

- VI. **Optimal path planning for UAVs using Genetic Algorithm**
Sonmez A, Kocyigit E., Kuğu E.
2015 International Conference on Unmanned Aircraft Systems, ICUAS 2015, Colorado, United States Of America, 9 - 12 June 2015, pp.50-55
- VII. **Reference trust model in e-commerce E-Ticarette Referans Güven Modeli**
Kuğu E.
2015 23rd Signal Processing and Communications Applications Conference, SIU 2015, Malatya, Turkey, 16 - 19 May 2015, pp.2545-2548
- VIII. **The architecture of mobile agent based distributed intrusion detection system (MABDIDS)**
Can O., Sahingoz O. K., Kuğu E.
World Congress on Engineering, WCE 2014, London, England, 2 - 04 July 2014, vol.1, pp.432-437
- IX. **Forest fire damage assessment using Object Based Image Analysis Nesne tabanlı görüntü analizi yöntemiyle orman yangini hasar tespiti**
Kuğu E., Kisa A.
2014 22nd Signal Processing and Communications Applications Conference, SIU 2014, Trabzon, Turkey, 23 - 25 April 2014, pp.1782-1785
- X. **Satellite image denoising using Bilateral Filter with SPEA2 optimized parameters**
Kuğu E.
6th International Conference on Recent Advances in Space Technologies, RAST 2013, İstanbul, Turkey, 12 - 14 June 2013, pp.217-223
- XI. **Simulation based multiple regression analysis of fuzzy logic crowd injury model**
Kuğu E., Sahingoz O. K.
7th International Conference on Application of Information and Communication Technologies, AICT 2013, Baku, Azerbaijan, 23 - 25 October 2013
- XII. **ACO algorithms with multi-core implementation**
Kuğu E., Sahingoz O. K.
7th International Conference on Application of Information and Communication Technologies, AICT 2013, Baku, Azerbaijan, 23 - 25 October 2013
- XIII. **Benefits of the virtualization technologies with intrusion detection and prevention systems**
Caliskan M., Ozsiginan M., Kuğu E.
7th International Conference on Application of Information and Communication Technologies, AICT 2013, Baku, Azerbaijan, 23 - 25 October 2013
- XIV. **Using agent based modeling and simulation for data mining**
Kuğu E., Altay L., Sahingoz O. K.
19th International Conference on Neural Information Processing, ICONIP 2012, Doha, Qatar, 12 - 15 November 2012, vol.7664 LNCS, pp.258-265
- XV. **Aspect-oriented design and implementation of secure agent communication system**
Sahingoz O. K., Kuğu E.
19th International Conference on Neural Information Processing, ICONIP 2012, Doha, Qatar, 12 - 15 November 2012, vol.7667 LNCS, pp.213-220
- XVI. **Fuzzy Logic Injury Design for Multi- Agent Crowd Modeling**
Kuğu E., Li J., McKenzie F. D., Sahingoz O. K.
- XVII. **Multi agent design and implementation of crowd injury model**
Kuğu E., McKenzie F. D., Li J., Sahingoz O. K.
2010 Spring Simulation Multiconference, SpringSim'10, Orlando, FL, United States Of America, 11 - 15 April 2010
- XVIII. **Parameter optimization for image denoising based on block matching and 3D collaborative filtering**
Pedada R., Kuğu E., Li J., Yue Z., Shen Y.
Medical Imaging 2009 - Image Processing, Lake Buena Vista, FL, United States Of America, 8 - 10 February 2009, vol.7259
- XIX. **Assessment of Denoising Algorithms by Evolving the Pareto Front**

Kuğu E., Li J.

Activities in Scientific Journals

Journal of Aeronautics and Space Technologies, Editor, 2015 - 2017

Memberships / Tasks in Scientific Organizations

IEEE Computer Society, Member, 2023 - Continues, United States Of America

IEEE, Member, 2022 - Continues, United States Of America

Scientific Refereeing

JOURNAL OF INDUSTRIAL AND MANAGEMENT OPTIMIZATION, Journal Indexed in SCI-E, August 2024

Necmettin Erbakan Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, May 2024

Fırat Üniversitesi Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, February 2024

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, National Scientific Refreed Journal, December 2023

TUBITAK Project, 1501 - Industry R & D Projects Support Program, SİSASOFT BİLGİ TEKNOLOJİLERİ VE İNOVASYON ANONİM ŞİRKETİ, Turkey, July 2023

Balkan Journal of Electrical and Computer Engineering, National Scientific Refreed Journal, February 2022

Balkan Journal of Electrical and Computer Engineering, National Scientific Refreed Journal, October 2021

JOURNAL OF WEB ENGINEERING, Journal Indexed in SCI-E, April 2021

COMPUTER NETWORKS, Journal Indexed in SCI-E, December 2020

Balkan Journal of Electrical and Computer Engineering, National Scientific Refreed Journal, July 2020

Balkan Journal of Electrical and Computer Engineering, National Scientific Refreed Journal, May 2020

Tasks In Event Organizations

Kuğu E., Genç Beyinler Yeni Fikirler (GBYF) Bitirme Projesi Yarışması - Ankara, Scientific Congress, Ankara, Turkey, Haziran 2024

Kuğu E., Genç Beyinler Yeni Fikirler (GBYF) Bitirme Projesi Yarışması - Ankara, Scientific Congress, Ankara, Turkey, Haziran 2023

Kuğu E., 36. Bilgisayar Mühendisliği Bölüm Başkanları (BMBB) Toplantısı, Workshop Organization, Diyarbakır, Turkey, Eylül 2022

Kuğu E., 36th International Conference on Computer Science and Engineering, Scientific Congress, Diyarbakır, Turkey, Eylül 2022

Kuğu E., 35. Bilgisayar Mühendisliği Bölüm Başkanları Toplantısı, Workshop Organization, Ankara, Turkey, Eylül 2021

Kuğu E., 6th International Conference on Computer Science and Engineering, Scientific Congress, Ankara, Turkey, Eylül 2021

Awards

KUĞU E., The Gene Newman Award for Excellence in M&S Research, Old Dominion University, February 2009