

## Asst. Prof. EMRAH ATILGAN

### Personal Information

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### International Researcher IDs

ScholarID: XUiTj40AAAAJ

ORCID: 0000-0002-0395-9976

Publons / Web Of Science ResearcherID: C-6456-2018

ScopusID: 36439179400

Yoksis Researcher ID: 271738

### Education Information

Doctorate, University of South Carolina, Bilgisayar Bilimi Ve Mühendisliği, United States Of America 2010 - 2016

Postgraduate, University of South Carolina, Bilgisayar Bilimi Ve Mühendisliği, United States Of America 2008 - 2010

Undergraduate, Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Matematik Bölümü, Turkey 2002 - 2006

### Dissertations

Doctorate, Computational Doping for Fuel Cell Material Design Based on Genetic Algorithms and Genetic Programming, University of South Carolina, Bilgisayar Bilimi Ve Mühendisliği, 2016

Postgraduate, Improving Protein Docking Using Efficient Sustainable Evolutionary Algorithm, University of South Carolina, Bilgisayar Bilimi Ve Mühendisliği, 2009

### Research Areas

Simulation and Modelling, Information System Reliability, Software Security, Artificial Intelligence, Computer Learning and Pattern Recognition, Evolutionary Computing, Text/Document Processing

### Academic Titles / Tasks

Assistant Professor, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, BİLGİSAYAR MÜHENDİSLİĞİ BÖLÜMÜ, 2020 - Continues

Assistant Professor, Hatay Mustafa Kemal University, Faculty Of Economics And Administrative Sciences, 2018 - 2020

Research Assistant, Hatay Mustafa Kemal University, Faculty Of Arts And Sciences, 2017 - 2018

Research Assistant, University of South Carolina, 2015 - 2015

### Courses

Statistics II, Undergraduate, 2019 - 2020

İşletme Matematiği II, Undergraduate, 2019 - 2020, 2018 - 2019

Matematik II, Undergraduate, 2018 - 2019

Business Mathematics I, Undergraduate, 2019 - 2020  
İstatistik I, Undergraduate, 2019 - 2020  
Matematik I, Undergraduate, 2018 - 2019  
Temel Bilgi Teknolojileri II, Undergraduate, 2018 - 2019  
Matris Teorisi I, Undergraduate, 2018 - 2019  
İstatistik I, Undergraduate, 2019 - 2020  
Bilgisayara Giriş I, Undergraduate, 2018 - 2019  
Bilgisayar Programlama II, Undergraduate, 2017 - 2018  
Temel Bilgisayar Teknolojileri, Undergraduate, 2018 - 2019  
Bilgisayar Programlama I, Undergraduate, 2018 - 2019  
Visual Programming I, Undergraduate, 2018 - 2019  
Temel Bilgisayar Bilimleri, Undergraduate, 2018 - 2019  
Olasılık ve İstatistik II, Undergraduate, 2017 - 2018  
Matematik I, Undergraduate, 2018 - 2019

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

- I. **New Wave Solutions of Time-Fractional Coupled Boussinesq-Whitham-Broer-Kaup Equation as A Model of Water Waves**  
Atilgan E., Senol M., Kurt A., Tasbozan O.  
CHINA OCEAN ENGINEERING, vol.33, pp.477-483, 2019 (SCI-Expanded)
- II. **First-principle-based computational doping of SrTiO<sub>3</sub> using combinatorial genetic algorithms**  
Atilgan E., Hu J.  
BULLETIN OF MATERIALS SCIENCE, vol.41, 2018 (SCI-Expanded)

## Articles Published in Other Journals

- I. **A novel strategy to avoid local optimum: Army-inspired genetic algorithm (AIGA)**  
KILINÇ M., ATILGAN E., ATIŞ C. D.  
Turkish Journal of Engineering, vol.8, no.3, pp.436-446, 2024 (Scopus)
- II. **Artificial Intelligence Research in Mental Health: A Bibliometric Evaluation**  
Atilgan E., Uslu E.  
Osmangazi Tıp Dergisi, vol.46, no.4, pp.627-636, 2024 (Peer-Reviewed Journal)
- III. **DoS and DDoS Attacks on Internet of Things and Their Detection by Machine Learning Algorithms**  
ŞİMŞEK M. M., ATILGAN E.  
Dicle Üniversitesi Mühendislik Fakültesi Mühendislik Dergisi, vol.15, no.2, pp.341-353, 2024 (Peer-Reviewed Journal)
- IV. **Bibliometric Analysis of Artificial Intelligence Research in the Healthcare**  
Atilgan E.  
Abant Sağlık Bilimleri ve Teknolojileri Dergisi, vol.4, no.1, pp.13-23, 2024 (Peer-Reviewed Journal)
- V. **Attacks on Availability of IoT Middleware Protocols: A Case Study on MQTT**  
Şimşek M. M., Atilgan E.  
Eskişehir Türk Dünyası Uygulama ve Araştırma Merkezi Bilişim Dergisi, vol.4, no.2, pp.16-27, 2023 (Peer-Reviewed Journal)
- VI. **A Review of Recent Machine Learning Approaches for Voice Authentication Systems**  
Can Z., Atilgan E.  
Journal of Information and Communication Technologies, vol.5, no.1, pp.95-113, 2023 (Peer-Reviewed Journal)
- VII. **Approximate Analytical Solutions of Conformable Time Fractional Clannish Random Walker's Parabolic (CRWP) Equation and Modified Benjamin-Bona-Mahony(BBM) equation**

Atilgan E., Taşbozan O., Kurt A., Mohyuddin S. T.

Universal Journal of Mathematics and Applications, vol.3, no.2, pp.61-68, 2020 (Peer-Reviewed Journal)

VIII. **New Travelling Wave Solutions For Time-Space Fractional Equations Arising in Nonlinear Optics**

Kurt A., Atilgan E., Şenol M., Taşbozan O., Baleanu D.

Journal of Fractional Calculus and Applications, vol.11, no.1, pp.138-144, 2020 (Peer-Reviewed Journal)

IX. **Numerical solutions of fractional Boussinesq-Whitham-Broer-Kaup and diffusive Predator-Prey equations with conformable derivative**

Şenol M., Kurt A., Atilgan E., Taşbozan O.

New Trends in Mathematical Science, vol.3, no.7, pp.286-300, 2019 (Peer-Reviewed Journal)

X. **Improving Protein Docking Using Sustainable Genetic Algorithms**

Atilgan E., Hu J.

International Journal of Computer Information Systems and Industrial Management Applications, vol.3, pp.248-255, 2011 (Scopus)

## Refereed Congress / Symposium Publications in Proceedings

I. **MQTT Security at a Glance**

ATILGAN E., ÖZÇELİK İ., YOLAÇAN E. N.

2021 International Conference on Information Security and Cryptology (ISCTURKEY), Ankara, Turkey, 2 - 03 December 2021, pp.138-142

II. **NEW TRAVELLING WAVE SOLUTIONS FOR TIME-SPACE FRACTIONAL EQUATIONS**

TAŞBOZAN O., KURT A., ATILGAN E., ŞENOL M.

International Conference on Mathematical Studies and Applications, 4 - 06 October 2018

III. **Health IT maturity and hospital quality**

Schooley B., Hikmet N., Atilgan E.

International Conference on Computational Science and Computational Intelligence (CSIC), Nevada, United States Of America, 15 - 17 December 2016, pp.45-50

IV. **A combinatorial genetic algorithm for computational doping based material design**

Atilgan E., Hu J.

17th Genetic and Evolutionary Computation Conference, GECCO 2015, Madrid, Spain, 11 - 15 July 2015, pp.1349-1350

V. **Efficient protein-ligand docking using sustainable evolutionary algorithms**

Atilgan E., Hu J.

2010 10th International Conference on Hybrid Intelligent Systems, HIS 2010, Atlanta, GA, United States Of America, 23 - 25 August 2010, pp.113-118

VI. **Efficient protein-ligand docking using sustainable evolutionary algorithm**

Atilgan E., Hu J.

12th Annual Genetic and Evolutionary Computation Conference, GECCO-2010, Portland, OR, United States Of America, 7 - 11 July 2010, pp.211-212

## Scientific Refereeing

ENERGIES, Journal Indexed in SCI-E, May 2021

COMPUTERS IN BIOLOGY AND MEDICINE, Journal Indexed in SCI-E, May 2021

INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH, Journal Indexed in SCI-E, February 2021

COMPUTERS, Journal Indexed in ESCI, December 2020

Symmetry-Basel, SCI Journal, August 2020

V. Uluslararası Bilgisayar Bilimleri ve Mühendisliği Konferansı, Conference Paper (Full Text), August 2020

MATHEMATICS, Journal Indexed in SCI-E, June 2020

MATHEMATICS, Journal Indexed in SCI-E, March 2020

IV. Uluslararası Bilgisayar Bilimleri ve Mühendisliği Konferansı, Conference Paper (Full Text), July 2019

IV. Uluslararası Bilgisayar Bilimleri ve Mühendisliği Konferansı, Conference Paper (Full Text), July 2019

IV. Uluslararası Bilgisayar Bilimleri ve Mühendisliği Konferansı, Conference Paper (Full Text), July 2019

International Conference on Cyber-enabled Distributed Computing and Knowledge Discovery, Conference Paper (Full Text), October 2012

## **Metrics**

Publication: 18

Citation (WoS): 28

Citation (Scopus): 67

H-Index (WoS): 4

H-Index (Scopus): 5