MD MURAT EMEÇ

Personal Information

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International Researcher IDs
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ScopusID: 57216408618

Biography

Dr. Murat Emeç, a graduate of Ege University's Department of Computer Engineering, furthered his academic journey by earning his master's and doctorate degrees at Dokuz Eylül University. His academic prowess was evident during his tenure as a lecturer at Marmara University from 2020 to 2022, where he guided numerous students and engaged in diverse projects.

Since 2022, Dr. Emeç has been working at Istanbul University, specializing in software, artificial intelligence, internet of things, health informatics ,and environmental informatics . His work and contributions in these fields are highly appreciated in academic circles and industry. Dr. Emeç's unique perspective, fostered by his interdisciplinary approach, is a source of intrigue for many.

Education Information

Doctorate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, Turkey 2018 - 2022
Postgraduate, Dokuz Eylul University, Sosyal Bilimler Enstitüsü, Yönetim Bilişim Sistemleri, Turkey 2014 - 2016
Undergraduate, Ege University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, Turkey 2010 - 2014

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Increasing communication security among internet of things, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, 2022
Postgraduate, RFID Teknolojisi Kullanarak Kampüs Harcama Sistemlerinin Tasarlanması Ve Uygulanması: Üniversite Örneği, Dokuz Eylul University, Sosyal Bilimler Enstitüsü, Yönetim Bilişim Sistemleri, 2016

Research Areas

Image and Video Processing, Computer Sciences, algorithms, Cryptography, Software Security, bioinformatics, Artificial

Intelligence, Computer Learning and Pattern Recognition, Computer Learning, Neural Networks, Software Engineering, Biomedical Image Processing, Telemedicine, Biostatistics and Medical Informatics, Engineering and Technology

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Feasibility of exergaming for upper extremity rehabilitation in people with multiple sclerosis: prospective clinical trial**
Özdoğar A. T., Emec M., Kaya E., Karakas H., Dastan S., Kahraman T., Aslan T., Baba C., Özcanhan M. H., Ozakbas S.
Acta Neurologica Belgica, 2024 (SCI-Expanded)

II. **A novel ensemble machine learning method for accurate air quality prediction**
Emeç M., Yurtsever M.
International Journal of Environmental Science and Technology, 2024 (SCI-Expanded)

III. **Prediction of LDL in hypertriglyceridemic subjects using an innovative ensemble machine learning technique**
Demirci F., Emeç M., Doruk O. G., Örmen M., Akan P., Özcanhan M. H.
Turkish Journal of Biochemistry, vol.48, no.6, pp.641-652, 2023 (SCI-Expanded)

IV. **A Hybrid Deep Learning Approach for Intrusion Detection in IoT Networks**
Emeç M., Özcanhan M. H.
Advances in Electrical and Computer Engineering, vol.22, no.1, pp.3-12, 2022 (SCI-Expanded)

Articles Published in Other Journals

I. **Application of Artificial Neural Network Methods to Anatolian Plate Earthquake Magnitude and Location Prediction**
Emeç M., Özcanhan M. H.
Journal of Engineering Technology and Applied Sciences, vol.9, no.2, pp.47-62, 2024 (Peer-Reviewed Journal)

II. **Medical Insurance Cost Prediction MedCost: Machine Learning Ensemble Approaches**
Emeç M.
European Journal of Technique, vol.14, no.1, pp.88-95, 2024 (Peer-Reviewed Journal)

III. **Potable Water Quality Prediction Using Artificial Intelligence and Machine Learning Algorithms for Better Sustainability**
Yurtsever M., Emeç M.
EGE ACADEMIC REVIEW, vol.23, no.2, pp.265-278, 2023 (ESCI)

IV. **RFID TABANLI HIZLI GEÇİŞ SİSTEMLERİ İÇİN İŞ AKIŞLARININ YÖNETİM AMAÇLI MODELENMESİ**
Emeç M., Tecim V.
Yönetim Bilişim Sistemleri Dergisi, vol.1, no.3, pp.307-317, 2016 (Peer-Reviewed Journal)

V. **RFID TEKNOLOJİSİ KULLANARAK KAMPÜS HARCAMA SİSTEMLERİNİN TASARLANMASI VE UYGULANMASI: ÜNİVERSİTE ÖRNEĞİ**
Emeç M., Tecim V.
Yönetim Bilişim Sistemleri Dergisi, vol.2, no.3, pp.77-90, 2016 (Peer-Reviewed Journal)

Books & Book Chapters

I. **Detecting Gait Disorders Using Machine Learning Analysis Based on Kinect and Smartwatch Data**
Uygur S., Emeç M., Özcanhan M. H.
in: Engineering and Technology Management in Challenging Times , Ferhan Çebi, Editor, Springer Nature, Basel, pp.189-202, 2024

II. **Artificial Intelligence and The Internet of Things**

Emeç M.

Academic Press , London, 2023

III. **Makine Öğrenmesi Algoritmalarında Hiper Parametre Belirleme**

Emeç M., Özcanhan M. H.

in: MÜHENDİSLİKTE ÖNCÜ VE ÇAĞDAŞ ÇALIŞMALAR, Enes YİĞİT,Umut ÖZKAYA, Editor, Duvar Yayınları, İzmir, pp.71-98, 2023

IV. **Veri Ön İşleme ve Öznitelik Mühendisliğinin Yapay Zekâ Yöntemlerine Uygulanması**

Emeç M., Özcanhan M. H.

in: MÜHENDİSLİKTE ÖNCÜ VE ÇAĞDAŞ ÇALIŞMALAR, Enes YİĞİT,Umut ÖZKAYA, Editor, Duvar Yayınları, İzmir, pp.33-54, 2023

V. **BİLGİSAYAR SİSTEMLERİNDE GÜVENLİK VE GİZLİLİK**

Emeç M.

in: Bilgisayar Sistemlerinde Güvenlik ve Gizlilik / Nesnelerin İnterneti (IoT) Güvenlik Tehditleri, Ömer Aydın, Editor, EFE AKADEMİ, İstanbul, pp.187-208, 2022

VI. **Consensus Approaches of High-Value Crypto Currencies and Application in SHA-3**

Emeç M.

in: Artificial Intelligence and Applied Mathematics in Engineering Problems, Jude Hemanth,Utku Kose, Editor, Springer International Publishing Ag, Berlin, pp.12-24, 2020

Refereed Congress / Symposium Publications in Proceedings

I. **Development a Machine Learning Model to Prediction of Expanded Disability Status Scale in Multiple Sclerosis Patients**

Emeç M.

ECTRIMS 2024, Kobenhavn, Denmark, 17 - 20 September 2024, pp.125-126

II. **HARNESSING THE POWER OF ARTIFICIAL INTELLIGENCE IN ADDRESSING CLIMATE CHANGE**

Emeç M.

BILTEK VIII-International Symposium on Current Developments in Science, Technology and Social Sciences, Paris, France, 24 - 26 October 2023, pp.21-22

III. **PREDICTION OF CANCER RECURRENCE AND DEATH RISK IN CANCER PATIENTS USING MACHINE LEARNING METHODS**

Emeç M.

BILTEK VIII-International Symposium on Current Developments in Science, Technology and Social Sciences, Paris, France, 24 - 26 October 2023, pp.24-25

IV. **Detecting Gait Disorders Using Machine Learning**

Emeç M., Özcanhan M. H.

INTERNATIONAL ENGINEERING AND TECHNOLOGY MANAGEMENT SUMMIT 2023, İstanbul, Turkey, 19 - 21 October 2023, pp.22-32

V. **Development of restless legs syndrome severity prediction models for people with multiple sclerosis using machine learning**

Emeç M.

9th Joint ECTRIMS-ACTRIMS meeting, Milan, Italy, 11 - 13 October 2023, pp.185-186

VI. **Feasibility of exergaming for upper extremity rehabilitation in people with multiple sclerosis**

Emeç M.

28th Annual Conference of the Rehabilitation in Multiple Sclerosis (RIMS), Genoa, Italy, 4 - 06 May 2023, pp.27

VII. **Artificial Intelligence for Early Detection and Personalized Treatment**

Emeç M.

IIIrd International Congress on Medical Informatics, İstanbul, Turkey, 28 - 30 September 2023, pp.5-6

VIII. **KİŞİSEL VERİLERİN DİJİTAL PLATFORMLARDA KİMLİKSİZLEŞTİRİLMESİ**

Emeç M.

FIRST INTERNATIONAL CONGRESS ON SOCIAL SCIENCES, İzmir, Turkey, 22 - 24 June 2022, pp.7-8

IX. **TIME SERIES APPROACH IN ANALYSIS OF BIG DATA**
Emeç M., Özcanhan M. H.
III. International Science and Innovation Congress, Ankara, Turkey, 9 - 12 June 2022, pp.24-25

X. **COMPARISON OF BIG DATA TIME SERIES ANALYSIS METHODS**
Emeç M., Özcanhan M. H.
V. INTERNATIONAL SCIENTIFIC AND VOCATIONAL STUDIES CONGRESS – ENGINEERING (BILMES EN 2020),
Ankara, Turkey, 12 - 15 December 2020, pp.209-220

XI. **THREE TYPES OF ATTACK SIMULATION ON INTERNET OF THINGS DEVICES**
Emeç M., Özcanhan M. H.
V. International Scientific and Vocational Studies Congress – Engineering (BILMES EN 2020), Ankara, Turkey, 12 -
15 December 2020, pp.412-422

XII. **Analysis of COVID-19 Data Using Arima Time Series Model**
Emeç M., Özcanhan M. H.
V. INTERNATIONAL SCIENTIFIC AND VOCATIONAL STUDIES CONGRESS – ENGINEERING, Ankara, Turkey, 12 - 15
December 2020, pp.104-114

XIII. **Performance Comparison of Four Free Cloud Services for IoT**
Emeç M., Özcanhan M. H.
2nd International Congress on Engineering and Architecture (ENAR-2019), Muğla, Turkey, 22 - 24 April 2019,
pp.2-3

Other Publications

I. **An anonymous High Triglyceride and LDL values Dataset**
Emeç M.
Other, pp.1-10, 2024

II. **ROUT-4-2023: RPL Based Routing Attack Dataset for IoT**
Emeç M.
Other, pp.1-10, 2023

Scientific Refereeing

Discover Artificial Intelligence, Other Indexed Journal, November 2024

SIGNAL, IMAGE AND VIDEO PROCESSING, Journal Indexed in SCI-E, November 2024

PEER-TO-PEER NETWORKING AND APPLICATIONS, Journal Indexed in SCI-E, August 2024

TARIM BILIMLERI DERGISI, Journal Indexed in SCI-E, July 2024

Journal of Metaverse, Other Indexed Journal, July 2024

COMPUTING (VIENNA/NEW YORK), Journal Indexed in SCI-E, April 2024

ISTANBUL BUSINESS RESEARCH, Journal Indexed in ESCI, April 2024

CLUSTER COMPUTING, Journal Indexed in SCI-E, March 2024

PEER-TO-PEER NETWORKING AND APPLICATIONS, Journal Indexed in SCI-E, January 2024

INTERNATIONAL JOURNAL OF MACHINE LEARNING AND CYBERNETICS, Journal Indexed in SCI-E, January 2024

JOURNAL OF GRID COMPUTING, Journal Indexed in SCI-E, December 2023

COMPUTING (VIENNA/NEW YORK), Journal Indexed in SCI-E, December 2023

Sustainable Social Development, Other journals, October 2023

SCIENTIFIC REPORTS, Journal Indexed in SCI-E, September 2023

INTERNATIONAL JOURNAL OF INFORMATION SECURITY, Journal Indexed in SCI-E, July 2023

SCIENTIFIC REPORTS, Journal Indexed in SCI-E, July 2023

Journal of Big Data, Journal Indexed in SCI-E, May 2023

International Advanced Researches and Engineering Journal, National Scientific Refreed Journal, April 2023

ETRI JOURNAL, Journal Indexed in SCI-E, April 2023

Balkan Journal of Electrical and Computer Engineering, Other Indexed Journal, March 2023

JOURNAL OF SUPERCOMPUTING, Journal Indexed in SCI-E, February 2023

International Advanced Researches and Engineering Journal, National Scientific Refreed Journal, May 2022

Metrics

Publication: 30
Citation (Scopus): 19
H-Index (Scopus): 2

Congress and Symposium Activities

ECTRIMS , Invited Speaker, Kobenhavn, Denmark, 2024

BILTEK VIII-International Symposium on Current Developments in Science,, Session Moderator, Paris, France, 2023

International Engineering and Technology Management Summit 2023– ETMS 2023, Invited Speaker, İstanbul, Turkey, 2023

Awards

Emeç M., Doktora Üstün Başarı Belgesi, Dokuz Eylül Üniversitesi / Fen Bilimleri Ensititüsü, April 2022