

Asst. Prof. KORAY AÇICI

Personal Information

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International Researcher IDs

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Education Information

Doctorate, Baskent University, Institute Of Science, Bilgisayar Mühendisliği, Turkey 2015 - 2021

Postgraduate, Baskent University, Institute Of Science, Bilgisayar Mühendisliği, Turkey 2013 - 2015

Undergraduate, Baskent University, Faculty Of Engineering, Department Of Computer Engineering, Turkey 1999 - 2005

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, DERİN ÖĞRENME TEKNİKLERİ KULLANILARAK KEMİK KIRIĞI TESPİTİ VE SINIFLANDIRMASI, Baskent University, Institute Of Science, 2021

Postgraduate, MikroRNA veri tabanlarında bilgi geri-getirimi, Baskent University, Institute Of Science, 2015

Research Areas

Computer Sciences, bioinformatics, Artificial Intelligence, Computer Learning and Pattern Recognition

Academic Titles / Tasks

Assistant Professor, Ankara University, Mühendislik Fakültesi, Yapay Zeka ve Veri Mühendisliği Bölümü, 2022 - Continues

Assistant Professor, Baskent University, Faculty Of Engineering, Department Of Computer Engineering, 2021 - 2022

Research Assistant, Baskent University, Faculty Of Engineering, Department Of Computer Engineering, 2014 - 2021

Research Assistant, Ankara University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2007 - 2009

Academic and Administrative Experience

Deputy Head of Department, Ankara University, Mühendislik Fakültesi, Yapay Zeka ve Veri Mühendisliği Bölümü, 2022 - Continues

Courses

OBJECT ORIENTED PROGRAMMING, Undergraduate, 2022 - 2023
İleri Sinirsel Modelleme, Doctorate, 2022 - 2023
Bilgisayar Programlama, Undergraduate, 2022 - 2023
INTRODUCTION TO MACHINE LEARNING, Undergraduate, 2022 - 2023
SPECIAL TOPICS II, Undergraduate, 2022 - 2023
BİYOBİLİŞİM, Postgraduate, 2021 - 2022
PROGRAMMING LANGUAGES CONCEPTS, Undergraduate, 2022 - 2023
PROGRAMLAMAYA GİRİŞ, Undergraduate, 2022 - 2023
BIOINFORMATICS, Undergraduate, 2021 - 2022
SCIENTIFIC PROGRAMMING, Undergraduate, 2022 - 2023
LIFE SCIENCES AND COMPUTER ENGINEERING , Undergraduate, 2021 - 2022
COMPUTER NETWORKS , Undergraduate, 2021 - 2022
BİLGISAYAR AĞLARI VE VERİ İLETİŞİMİ, Postgraduate, 2021 - 2022

Advising Theses

Açııcı K., Tersine mühendislik yöntemleri ve bilgisayar uygulamaları analizi, Postgraduate, G.ÜĞURLU(Student), 2022

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **The Future of Microreactors: Technological Advantages, Economic Challenges, and Innovative Licensing Solutions with Blockchain**
Ekinci F., GÜZEL M. S., Acici K., Asuroglu T.
APPLIED SCIENCES-BASEL, vol.14, no.15, 2024 (SCI-Expanded)
- II. **Artificial Intelligence in Biomaterials: A Comprehensive Review**
Gokcekuyu Y., Ekinci F., GÜZEL M. S., Acici K., Aydin S., Asuroglu T.
APPLIED SCIENCES-BASEL, vol.14, no.15, 2024 (SCI-Expanded)
- III. **Advancing Crayfish Disease Detection: A Comparative Study of Deep Learning and Canonical Machine Learning Techniques**
ATILKAN Y., Kirik B., AÇICI K., Benzer R., Ekinci F., GÜZEL M. S., BENZER S., Asuroglu T.
APPLIED SCIENCES-BASEL, vol.14, no.14, 2024 (SCI-Expanded)
- IV. **Exploring Blockchain for Nuclear Material Tracking: A Scoping Review and Innovative Model Proposal**
Ecemis I. N., Ekinci F., AÇICI K., GÜZEL M. S., MEDENİ İ. T., Asuroglu T.
ENERGIES, vol.17, no.12, 2024 (SCI-Expanded)
- V. **Categorization of Alzheimer's disease stages using deep learning approaches with McNemar's test**
Şener B., Açııcı K., Sümer E.
PEERJ COMPUTER SCIENCE, vol.10, pp.1-30, 2024 (SCI-Expanded)
- VI. **Cloud type classification using deep learning with cloud images**
Güzel M. S., Kalkan M., Bostancı G. E., Açııcı K., Aşuroğlu T.
PEERJ COMPUTER SCIENCE, vol.10, pp.1-28, 2024 (SCI-Expanded)
- VII. **Enhancing Tissue Equivalence in 7Li Heavy Ion Therapy with MC Algorithm Optimized Polymer-Based Bioinks**
Ekinci F., Açııcı K., Asuroglu T.
JOURNAL OF FUNCTIONAL BIOMATERIALS, vol.14, no.12, pp.1-17, 2023 (SCI-Expanded)
- VIII. **MC TRIM Algorithm in Mandibula Phantom in Helium Therapy**
Ekinci F., AÇICI K., Asuroglu T., EMEK SOYLU B.

HEALTHCARE, vol.11, no.18, 2023 (SCI-Expanded)

- IX. **Crohn's Disease Prediction Using Sequence Based Machine Learning Analysis of Human Microbiome**
Unal M., Bostanci E., Ozkul C., Acici K., Asuroglu T., Guzel M. S.
DIAGNOSTICS, vol.13, no.17, 2023 (SCI-Expanded)
- X. **Deep Learning in Diagnosis of Dental Anomalies and Diseases: A Systematic Review**
Sivari E., Senirkentli G. B., BOSTANCI G. E., GÜZEL M. S., AÇICI K., Asuroglu T.
Diagnostics, vol.13, no.15, 2023 (SCI-Expanded)
- XI. **Monte Carlo Simulation of TRIM Algorithm in Ceramic Biomaterial in Proton Therapy**
Ekinci F., Asuroglu T., Acici K.
MATERIALS, vol.16, no.13, pp.1-17, 2023 (SCI-Expanded)
- XII. **Multilabel Genre Prediction Using Deep-Learning Frameworks**
Ünal F. Z., Güzel M. S., Bostancı G. E., Açıcı K., Aşuroğlu T.
APPLIED SCIENCES, vol.13, no.15, pp.1-21, 2023 (SCI-Expanded)
- XIII. **Deep-Learning-Based Approaches for Semantic Segmentation of Natural Scene Images: A Review**
Emek Soylu B., Güzel M. S., Bostancı G. E., Ekinci F., Aşuroğlu T., Açıcı K.
ELECTRONICS (Basel), vol.12, no.12, pp.1-49, 2023 (SCI-Expanded)
- XIV. **Semantic Segmentation with High-Resolution Sentinel-1 SAR Data**
Erten H., Bostanci E., Acici K., Guzel M. S., Asuroglu T., Aydin A.
APPLIED SCIENCES-BASEL, vol.13, no.10, 2023 (SCI-Expanded)
- XV. **Machine learning based orthodontic treatment planning for mixed dentition borderline cases suffering from moderate to severe crowding: An experimental research study**
Senirkentli B., Bingöl S. İ., Ünal M., Bostancı G. E., Güzel M. S., Açıcı K.
TECHNOLOGY AND HEALTH CARE, vol.2023, no.2023, pp.1-13, 2023 (SCI-Expanded)
- XVI. **Machine Learning Analysis of RNA-seq Data for Diagnostic and Prognostic Prediction of Colon Cancer**
Bostanci E., Kocak E., Unal M., Guzel M. S., Açıcı K., Asuroglu T.
SENSORS, vol.23, no.6, 2023 (SCI-Expanded)
- XVII. **A New Approach for Gastrointestinal Tract Findings Detection and Classification: Deep Learning-Based Hybrid Stacking Ensemble Models**
Sivari E., BOSTANCI G. E., GÜZEL M. S., AÇICI K., Asuroglu T., Ercelebi Ayyildiz T.
DIAGNOSTICS, vol.13, no.4, 2023 (SCI-Expanded)
- XVIII. **Interpretation of Magnetic Resonance Images of Temporomandibular Joint Disorders by Using Deep Learning**
Özsarı Ş., Yapicioglu F. R., Yilmaz D., Kamburoglu K., Guzel M. S., Bostanci G. E., Acici K., Asuroglu T.
IEEE ACCESS, vol.11, pp.49102-49113, 2023 (SCI-Expanded)
- XIX. **Femoral neck fracture detection in X-ray images using deep learning and genetic algorithm approaches**
Beyaz S., Acici K., Sumer E.
JOINT DISEASES AND RELATED SURGERY, vol.31, no.2, pp.175-183, 2020 (SCI-Expanded)
- XX. **Parkinson's disease monitoring from gait analysis via foot-worn sensors**
Asuroglu T., Acici K., Erdas C. B., Toprak M. K., Erdem H., Ogul H.
BIOCYBERNETICS AND BIOMEDICAL ENGINEERING, vol.38, no.3, pp.760-772, 2018 (SCI-Expanded)
- XXI. **Retrieving relevant experiments: The case of microRNA microarrays**
Acici K., Terzi Y. K., Ogul H.
BIOSYSTEMS, vol.134, pp.71-78, 2015 (SCI-Expanded)

Articles Published in Other Journals

- I. **Airborne imagery and lidar based 3D reconstruction using commercial drones**
Açıcı K., Erdal Ö. M., Yılmaz A., Ünal M., Bostancı G. E., Güzel M. S.

Communications Faculty of Sciences University of Ankara Series A2-A3: Physical Sciences and Engineering, vol.65, no.1, pp.16-29, 2023 (Peer-Reviewed Journal)

- II. **Comparison of different machine learning approaches to detect femoral neck fractures in x-ray images**
Acici K., Sumer E., Beyaz S.
HEALTH AND TECHNOLOGY, vol.11, no.3, pp.643-653, 2021 (ESCI)
- III. **T4SS Effector Protein Prediction with Deep Learning**
Acici K., Asuroglu T., Erdas C. B., Ogul H.
DATA, vol.4, no.1, 2019 (ESCI)
- IV. **HANDY: A Benchmark Dataset for Context-Awareness via Wrist-Worn Motion Sensors**
Acici K., Erdas C. B., Asuroglu T., Ogul H.
DATA, vol.3, no.3, 2018 (ESCI)
- V. **Comparison of Artificial Neural Networks and Genetic Programming Methods For Activity Recognition**
Erdaş Ç. B., Aşuroğlu T., Açıcı K., Oğul H.
Akıllı Sistemlerde Yenilikler ve Uygulamaları Sempozyumu BİLDİRİLER KİTABI, vol.1, no.1, pp.62-66, 2018 (Conference Book)
- VI. **A random forest method to detect parkinson's disease via gait analysis**
Açıcı K., Erdaş Ç. B., Aşuroğlu T., Kılınç Toprak M., Erdem H., Oğul H.
COMMUNICATIONS IN COMPUTER AND INFORMATION SCIENCE, vol.744, pp.609-619, 2017 (Scopus)
- VII. **Integrating Features for Accelerometer-based Activity Recognition**
Erdaş Ç. B., Atasoy I., Açıcı K., Oğul H.
PROCEDIA COMPUTER SCIENCE, vol.98, pp.522-527, 2016 (Scopus)

Books & Book Chapters

- I. **İşletme Yönetiminde Makine Öğrenmesi Uygulamaları**
Açıcı K.
in: Dijital Çağda İşletme Yönetimi , Selay Ilgaz Sümer, Emre Sümer, Editor, Gazi Yayın Dağıtım, Ankara, pp.49-71, 2022

Refereed Congress / Symposium Publications in Proceedings

- I. **Assessment of Parkinson's Disease Severity Using Gait Data: A Deep Learning-Based Multimodal Approach**
Faiem N., Aşuroğlu T., Açıcı K., Kallonen A., Van Gils M.
First Nordic Conference, NCDHWS 2024, Oulu, Finland, 7 - 08 May 2024, pp.29-48
- II. **Unsupervised Learning for Characterizing Type IV Secreted Effectors**
AÇICI K., Asuroglu T.
4th International Conference on Applied Artificial Intelligence, ICAPAI 2024, Halden, Norway, 16 April 2024
- III. **Development of a Simulator for UAV Swarm Operation Planning using Evolutionary Algorithms**
Aydın M., Bostancı G. E., Güzel M. S., Açıcı K.
Cognitive Models and Artificial Intelligence Conference, Ankara, Turkey, 26 - 28 October 2023, vol.6, pp.13-17
- IV. **A Reverse Engineering Tool that Directly Injects Shellcodes to the Code Caves in Portable Executable Files.**
Açıcı K., Uğurlu G.
5. International Conference on Theoretical and Applied Computer Science and Engineering 2022, İstanbul, Turkey, 30 September - 01 October 2022
- V. **An Analysis Tool that Detects The Code Caves in Specified Sizes for Portable Executable Files**

Uğurlu G., Açıcı K.

5. International Conference on Theoretical and Applied Computer Science and Engineering, İstanbul, Turkey, 30 September - 01 October 2022

- VI. **Defeating Anti-Debugging Techniques Using A Debugger**
Uğurlu G., Açıcı K.
INTERNATIONAL SCIENTIFIC RESEARCH CONGRESS DEDICATED TO THE 30TH ANNIVERSARY OF BAKU EURASIA UNIVERSITY, Baku, Azerbaijan, 27 - 28 April 2022, pp.391-397
- VII. **Derin Öğrenme ve Genetik Algoritma Yaklaşımları Kullanılarak X-Ray Görüntülerinde Femur Boyun Kırığı Tespiti**
Beyaz S., Açıcı K., Sümer E.
Uluslararası Sağlıkta Yapay Zeka Kongresi 2020, İzmir, Turkey, 16 - 18 January 2020, vol.30, pp.69
- VIII. **Comparison of Artificial Neural Networks and Genetic Programming Methods For Activity Recognition**
Erdaş Ç. B., Aşuroğlu T., Açıcı K., Oğul H.
Akıllı Sistemler ve Uygulamaları , Antalya, Turkey, 5 - 07 October 2017, vol.1, pp.62-66
- IX. **Integrating features of accelerometer based for tremor recognition**
Toprak M. K., Avci A. Y., Acici K., Erdas B., Ogul H.
23rd World Congress of Neurology (WCN), Kyoto, Japan, 16 - 21 September 2017, vol.381, pp.362
- X. **Information retrieval in metal music sub-genres Metal Müzik Alt Türlerinde Bilgi Geri-Getirimi**
Acici K., Asuroglu T., Ogul H.
25th Signal Processing and Communications Applications Conference, SIU 2017, Antalya, Turkey, 15 - 18 May 2017
- XI. **A Random Forest Method to Detect Parkinson's Disease via Gait Analysis**
Acici K., Erdas C. B., Asuroglu T., Toprak M. K., Erdem H., Ogul H.
18th International Conference on Engineering Applications of Neural Networks (EANN), Athens, Greece, 25 - 27 August 2017, vol.744, pp.609-619
- XII. **Texture of Activities: Exploiting Local Binary Patterns for Accelerometer Data Analysis**
Asuroglu T., Acici K., Erdas C. B., Ogul H.
12th International Conference on Signal-Image Technology and Internet-Based Systems (SITIS), Naples, Italy, 28 November - 01 December 2016, pp.135-138
- XIII. **Integrating features for accelerometer-based activity recognition**
Erdas C. B., Atasoy I., Acici K., Ogul H.
7th International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN) / 6th International Conference on Current and Future Trends of Information and Communication Technologies in Healthcare (ICTH), London, Canada, 19 - 22 September 2016, vol.98, pp.522-527
- XIV. **Comparison of Similarity Metrics in Microarray Experiment Retrieval**
Acici K., Ogul H.
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.927-930
- XV. **Inferring Microarray Relevance By Enrichment Of Chemotherapy Resistance-Based MicroRNA Sets**
Acici K., Ogul H.
19th IEEE International Conference on Intelligent Engineering Systems (INES), Bratislava, Slovakia, 3 - 05 September 2015, pp.389-393
- XVI. **Sensitive prediction of bacterial type IV effectors Bakteriyel tip IV efektörlerinin duyarlı{dotless} tahmini**
Açıcı K., Şener D. D., Oğul H.
2014 18th National Biomedical Engineering Meeting, BIYOMUT 2014, İstanbul, Turkey, 16 - 17 October 2014

Metrics

Citation (WoS): 185

Citation (Scopus): 227

H-Index (WoS): 6

H-Index (Scopus): 6

Congress and Symposium Activities

International Hybrid Workshop on "Start-to-End Beamline Optimization for Synchrotron Radiation and Free-Electron Laser Facilities through Artificial Intelligence Approaches, Attendee, Hamburg, Germany, 2022

5. International Conference on Theoretical and Applied Computer Science and Engineering 2022 (ICTACSE 2022), Attendee, İstanbul, Turkey, 2022

Awards

Uğurlu G., Açıcı K., Best Paper Award, Ictacse 2022 Organization, September 2022

Beyaz S., Açıcı K., Sümer E., Oral Presentation First Place Award, Uluslararası Sağlıkya Yapay Zeka 2020 Kongresi, January 2020