

Asst. Prof. FUAT AKAL

Personal Information

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International Researcher IDs

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Education Information

Doctorate, Eidgenössische Technische Hochschule, ETHZ (The Federal Institute of Technology, Zürich), Bilgisayar Mühendisliği, Switzerland 2001 - 2007

Postgraduate, Hacettepe University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, Turkey 1997 - 2000

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, Turkey 1991 - 1996

Dissertations

Doctorate, Replication in a Database Cluster with Freshness and Correctness Guarantees, Eidgenössische Technische Hochschule, Ethz (The Federal Institute Of Technology, Zürich), Bilgisayar Mühendisliği, 2007

Postgraduate, Kavram tabanlı türkçe arama makinesi, Hacettepe Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2000

Research Areas

Computer Sciences, Database and Data Structures, Database Systems, Artificial Intelligence, Computer Learning and Pattern Recognition, Knowledge Engineering, Software, Software Engineering, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Bilgisayar Bilimleri Mühendisliği Bölümü, 2018 - Continues

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Bilgisayar Bilimleri Mühendisliği Bölümü, 2015 - 2018

Lecturer, Hacettepe University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2013 - 2015

Expert, Universitaet Zürich (University of Zürich), Functional Genomics Center Zurich, 2008 - 2013

Research Assistant, Eidgenössische Technische Hochschule, ETHZ (The Federal Institute of Technology, Zürich), Bilgisayar Mühendisliği, 2001 - 2007

Research Assistant, Hacettepe University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 1996 - 2000

Published journal articles indexed by SCI, SSCI, and AHCI

- I. A score for predicting colchicine resistance at the time of diagnosis in familial Mediterranean fever: data from the TURPAID registry

BATU AKAL E. D., ŞENER S., Aydın E. A., Aliyev E., Bagrul I., Türkmen Ş., Akgün Ö., BALIK Z., Tanatar A., BAYINDIR Y., et al.

Rheumatology (United Kingdom), vol.63, no.3, pp.791-797, 2024 (SCI-Expanded)

- II. **Automated AI-based grading of neuroendocrine tumors using Ki-67 proliferation index: comparative evaluation and performance analysis**
Yücel Z., AKAL F., Oltulu P.
Medical and Biological Engineering and Computing, 2024 (SCI-Expanded)
- III. **Tales of Turbulence: BERT-based Multimodal Analysis of FED Communication Dynamics Amidst COVID-19 Through FOMC Minutes**
Taskin B., AKAL F.
Computational Economics, 2024 (SCI-Expanded)
- IV. **Mitotic cell detection in histopathological images of neuroendocrine tumors using improved YOLOv5 by transformer mechanism**
Yücel Z., AKAL F., Oltulu P.
Signal, Image and Video Processing, vol.17, no.8, pp.4107-4114, 2023 (SCI-Expanded)
- V. **Detection of spermatogonial stem/progenitor cells in prepubertal mouse testis with deep learning**
Kahveci B., Önen S., AKAL F., KORKUSUZ P.
Journal of Assisted Reproduction and Genetics, vol.40, no.5, pp.1187-1195, 2023 (SCI-Expanded)
- VI. **Transforming temporal-dynamic graphs into time-series data for solving event detection problems**
Tasci K., AKAL F.
Turkish Journal of Electrical Engineering and Computer Sciences, vol.31, no.5, pp.876-891, 2023 (SCI-Expanded)
- VII. **Diagnosing growing pains in children by using machine learning: a cross-sectional multicenter study**
AKAL F., BATU AKAL E. D., Sonmez H. E., Karadag S. G., Demir F., Ayaz N. A., Sozeri B.
MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, vol.60, no.12, pp.3601-3614, 2022 (SCI-Expanded)
- VIII. **A Machine Learning Approach to Detection of Trade-Based Manipulations in Borsa Istanbul**
Uslu N. C., AKAL F.
COMPUTATIONAL ECONOMICS, vol.60, no.1, pp.25-45, 2022 (SCI-Expanded)

Articles Published in Other Journals

- I. **Attention Based Energy Demand Forecasting in Smart Grid Environments**
ISIKDEMIR Y. E., AKAL F.
Firat University journal of experimental and computational engineering (Online), vol.3, no.3, pp.227-240, 2024 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Do Lunar Cycles Affect Bitcoin Prices?**
Erdogan U., Isildar A. B., Erdogan T. G., AKAL F.
International Conference on Computing, Intelligence and Data Analytics, ICCIDA 2022, Kocaeli, Turkey, 16 - 17 September 2022, vol.643 LNNS, pp.271-280
- II. **Effects of Different Parameters on Sleep Quality**
Kunduracioglu E., Korkmaz E., Erdogan T. G., AKAL F.
International Conference on Computing, Intelligence and Data Analytics, ICCIDA 2022, Kocaeli, Turkey, 16 - 17 September 2022, vol.643 LNNS, pp.358-369
- III. **Detection of Trade-Based Manipulations in Borsa Istanbul with Artificial Neural Networks Borsa istanbul'da Islem Bazh Manipulasyonlarm Yapay Sinir Aglanyla Tespit Edilmesi**
Uslu N. C., AKAL F.
7th International Conference on Computer Science and Engineering, UBMK 2022, Diyarbakır, Turkey, 14 - 16

September 2022, pp.366-370

- IV. **KOLŞİSİNE DİRENÇLİ PEDIATRİK AAA HASTALARINDA ANTI-IL1 TEDAVİSİ - HELIOS VERİ TABANI VERİLERİ**
KASAP M., SAĞ E., AKAL F., ATALAY E., KAYA AKCA Ü., DEMİR S., DEMİREL U. D., BATU AKAL E. D., BİLGİNER Y., ÖZEN S.
5. Çocuk Romatoloji Kongresi, Turkey, 12 - 13 December 2020
- V. **ANTI-IL1 TREATMENT IN COLCHICINE RESISTANT PAEDIATRIC FMF PATIENTS-REAL LIFE DATA FROM THE HELIOS REGISTRY**
SAĞ E., AKAL F., ATALAY E., KAYA AKCA Ü., DEMİR S., Demirel D., BATU AKAL E. D., BİLGİNER Y., ÖZEN S.
EULAR 2020 e-congress, BİLİNMEYEN ÜLKELER (DİĞER), 3 - 05 June 2020, vol.79, pp.179-180
- VI. **THE HELIOS (HACETTEPE UNIVERSITY ELECTRONIC RESEARCH FORMS) REGISTRY: USE OF BIOLOGIC DRUGS IN AUTOINFLAMMATORY DISEASES**
DEMİR S., Batu E. D., AKAL F., SAĞ E., Akca U. K., Arslanoglu E., Aliyev E., YÜKSEL K., KESKİN A., BİLGİNER Y., et al.
Annual European Congress of Rheumatology (EULAR), Madrid, Spain, 12 - 15 June 2019, vol.78, pp.1946-1947
- VII. **Life Sciences Research Center and Data Management**
AKAL F.
21st National Biomedical Engineering Meeting (BIYOMUT), İstanbul, Turkey, 24 November - 26 December 2017
- VIII. **Detecting Design Patterns in Object-Oriented Design Models by Using a Graph Mining Approach**
Oruc M., AKAL F., SEVER H.
4th International Conference in Software Engineering Research and Innovation (CONISOFT), Puebla, Mexico, 27 - 29 April 2016, pp.115-121

Supported Projects

KORKUSUZ P., ÖNEN S., Kahveci B., AKAL F., Project Supported by Higher Education Institutions, FARE TESTİSİ MİKROSKOP GÖRÜNTÜLERİNDEN YAPAY ZEKÂ TEKNİKLERİ İLE TÜBÜL VE SPERMATOGONYAL KÖK HÜCRE TESPİTİ, 2019 - 2021

AKAL F., SEVER H., ORUÇ M., Project Supported by Higher Education Institutions, Nesneye Yönelik Tasarım Modellerindeki Tasarım Örüntülerinin Çizge Madenciliği Yaklaşımıyla Tesbit Edilmesi, 2016 - 2019

Metrics

Publication: 17

Citation (WoS): 5

H-Index (WoS): 1