Assoc. Prof. ÜMİT ATİLA

Personal Information

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International Researcher IDs
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Education Information

Doctorate, Karabuk University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, Turkey
2009 - 2013
Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler, Turkey 2004 -
2007
Undergraduate, Gazi University, Teknik Eğitim Fakültesi, Elektronik ve Bilgisayar Eğitimi,
Turkey 1998 - 2002

Biography

Ümit Atila received his BSc and MSc degrees from Gazi University in 2002 and 2008, and his PhD from Karabuk University in 2013. He worked as a software developer and project manager at the Ministry of National Education between 2005-2009 and at Gazi University Directorate of Information Technologies between 2009-2012. He worked as assistant professor at Karabuk University Computer Engineering Department between 2013-2021. Ümit Atila, who carries out his research in the fields of Artificial Intelligence, Deep Learning and Meta-Heuristic Optimization, continues his career as an associate professor in the Computer Engineering Department of Gazi University.

Foreign Languages

English, C2 Mastery

Dissertations

Doctorate, 3b cbs kapsamında çok katlı bina yangınlarına yönelik akıllı bireysel tahliye modelinin yapay sinir ağı ile tasarlanması, Karabuk University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2013
Postgraduate, Rfid kullanılarak kimyasal malzeme stok takip sisteminin tasarlanması, Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler, 2007

Academic Titles / Tasks

Assistant Professor, Gazi University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2021 - Continues
Assistant Professor, Karabuk University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2013 - 2021
Lecturer, Gazi University, Ankara Meslek Yüksekokulu, Bilgisayar Proğramcılığı, 2012 - 2013
Expert, Gazi University, Rektörlük, Bilgi İşlem Dairesi Başkanlığı, 2009 - 2012

Academic and Administrative Experience

Deputy Head of Department, Gazi University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2021 - 2023

Published journal articles indexed by SCI, SSCI, and AHCI

I. **An ensemble approach for classification of tympanic membrane conditions using soft voting classifier**
Akyol K., Uçar E., ATİLA Ü., Uçar M.
Multimedia Tools and Applications, vol.83, no.32, pp.77809-77830, 2024 (SCI-Expanded)

II. **Multimodal Fusion for Enhanced Semantic Segmentation in Brain Tumor Imaging: Integrating Deep Learning and Guided Filtering Via Advanced 3D Semantic Segmentation Architectures**
Saleh A., ATİLA Ü., Menemencioğlu O.
International Journal of Imaging Systems and Technology, vol.34, no.5, 2024 (SCI-Expanded)

III. **A novel hybridization approach to improve the critical distance clustering algorithm: Balancing speed and quality**
Hamed Kuwil F., ATİLA Ü.
Expert Systems with Applications, vol.247, 2024 (SCI-Expanded)

IV. **A nested optimization approach for robot gripper multi-objective optimization problem**
Dörterler M., Atila Ü., Top N., Şahin İ.
Expert Systems with Applications, vol.239, 2024 (SCI-Expanded)

V. **Turkish lip-reading using Bi-LSTM and deep learning models**
ATİLA Ü., Sabaz F.
Engineering Science and Technology, an International Journal, vol.35, 2022 (SCI-Expanded)

VI. **Classification of Different Tympanic Membrane Conditions Using Fused Deep Hypercolumn Features and Bidirectional LSTM**
Ucar M., Akyol K., Atila Ü., Ucar E.
IRBM, vol.43, no.3, pp.187-197, 2022 (SCI-Expanded)

VII. **Automated detection of Covid-19 disease using deep fused features from chest radiography images**
Ucar E., ATİLA Ü., Ucar M., Akyol K.
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.69, 2021 (SCI-Expanded)

VIII. **Plant leaf disease classification using EfficientNet deep learning model**
Atila Ü., Ucar M., Akyol K., Ucar E.
ECOLOGICAL INFORMATICS, vol.61, 2021 (SCI-Expanded)

IX. **Learn from one data set to classify all - A multi-target domain adaptation approach for white blood cell classification**
Baydilli Y. Y., Atila Ü., Elen A.
COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE, vol.196, 2020 (SCI-Expanded)

X. **A novel data clustering algorithm based on gravity center methodology**
Kuwil F. H., Atila Ü., Abu-Issa R., Murtagh F.
EXPERT SYSTEMS WITH APPLICATIONS, vol.156, 2020 (SCI-Expanded)

XI. **Classification of DNA damages on segmented comet assay images using convolutional neural network**
Atila Ü., Baydilli Y. Y., Sehirli E., Turan M. K.

COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE, vol.186, 2020 (SCI-Expanded)
XII. **Classification of white blood cells using capsule networks**
Baydilli Y. Y., Atila Ü.
COMPUTERIZED MEDICAL IMAGING AND GRAPHICS, vol.80, 2020 (SCI-Expanded)
XIII. **SmartEscape: A Mobile Smart Individual Fire Evacuation System Based on 3D Spatial Model**
Atila Ü., Ortakci Y., Ozacar K., Demiral E., Karas I. R.
ISPRS INTERNATIONAL JOURNAL OF GEO-INFORMATION, vol.7, no.6, 2018 (SCI-Expanded)

Articles Published in Other Journals

I. **Deep learning based detection of silicosis from computed tomography images**
Aksoy H., ATİLA Ü., Arslan S.
Computer Methods and Programs in Biomedicine Update, vol.6, 2024 (Scopus)
II. **A Deep Learning Based Offline Optical Character Recognition Model for Printed Ottoman Turkish**
Al-Khaffaf A., Atila Ü.
TECHNIUM: ROMANIAN JOURNAL OF APPLIED SCIENCES AND TECHNOLOGY, vol.18, pp.47-64, 2023 (Peer-Reviewed Journal)
III. **Comparing The Effect of Under-Sampling and Over-Sampling on Traditional Machine Learning Algorithms for Epileptic Seizure Detection**
AKYOL K., ATİLA Ü.
Academic Platform Journal of Engineering and Science, vol.8, no.2, pp.279-285, 2020 (Peer-Reviewed Journal)
IV. **Retinal Görüntülerde Eksuda Lezyonlarının Tespiti Üzerine Bir Çalışma**
ATİLA Ü., AKYOL K., SABAZ F.
Bilişim Teknolojileri Dergisi, vol.13, no.1, pp.27-36, 2020 (Peer-Reviewed Journal)
V. **A Study on Performance Improvement of Heart Disease Prediction by Attribute Selection Methods**
AKYOL K., ATİLA Ü.
Academic Platform Journal of Engineering and Science, vol.7, no.2, pp.174-179, 2019 (Peer-Reviewed Journal)
VI. **Use of ANN in Predicting Life Expectancy: The Case of Turkey**
AYDIN A., ATİLA Ü., AYDIN S.
Artificial Intelligence Studies, vol.1, no.1, pp.1-7, 2018 (Peer-Reviewed Journal)
VII. **Intelligent Mobile Indoor Navigation System for Fire Evacuation Based on Artificial Neural Network**
ORTAKCI Y., ATİLA Ü., KARAŞ İ. R., DEMİRAL E.
International Journal of Computer Science and Information Security, vol.14, no.11, pp.980-996, 2016 (Peer-Reviewed Journal)
VIII. **Integration of CityGML and Oracle Spatial for implementing 3D network analysis solutions and routing simulation within 3D-GIS environment**
ATİLA Ü., KARAŞ İ. R., RAHMAN A. A.
Geo-spatial Information Science, vol.16, no.4, pp.221-237, 2013 (Scopus)
IX. **A genetic algorithm approach for finding the shortest driving time on mobile devices**
KARAŞ İ. R., ATİLA Ü.
Scientific Research And Essays, vol.6, no.2, pp.394-405, 2011 (Peer-Reviewed Journal)
X. **Rfıd Teknolojisi Kullanılarak Kimyasal Malzeme Stok Takibinin İnternet Tabanlı Olarak Gerçekleştirilmesi**
ATİLA Ü., TOPALOĞLU N.
Teknoloji, vol.11, no.3, pp.153-166, 2008 (Peer-Reviewed Journal)

Books

I. **MAKİNE ÖĞRENMESİ**

ATİLA Ü., AKYOL K.

in: BİYOMEDİKAL MÜHENDİSLİĞİNE GİRİŞ, Özkan Altural Hayriye, Editor, NOBEL AKADEMİK YAYINCILIK EĞİTİM DANIŞMANLIK TİC. LTD. ŞTİ., Ankara, pp.703-729, 2023

II. **Developing a 3D Routing Instruction Engine for Indoor Environment**

KARAŞ İ. R., ATİLA Ü., DEMİRAL E.

in: Geo-Spatial Knowledge and Intelligence, Yuan H., Geng J., Bian F., Editor, Springer, pp.34-42, 2017

III. **3D Network Analysis for User Centric Evacuation Systems**

ATİLA Ü., KARAŞ İ. R., ORTAKCI Y.

in: Encyclopedia of GIS, Shashi Shekhar, Hui Xiong, Xun Zhou, Editor, Springer, Cham, pp.20-33, 2017

IV. **Automatic Generation of 3D Networks in CityGML and Design of an Intelligent Individual Evacuation Model for Building Fires Within the Scope of 3D GIS**

ATİLA Ü., KARAŞ İ. R., TURAN M. K., RAHMAN A. A.

in: Innovations in 3D Geo Information Sciences Series Lecture Notes in Geoinformation and Cartography, Umit Isikdag, Editor, Springer, Cham, pp.123-142, 2014

V. **A 3D-GIS Implementation for Realizing 3D Network Analysis and Routing Simulation for Evacuation Purpose**

ATİLA Ü., KARAŞ İ. R., RAHMAN A. A.

in: Lecture Notes in Geoinformation and Cartography, Pouliot, J. Daniel, S. Hubert, F. Zamyadi, A.,, Editor, Springer, Berlin, Heidelberg, pp.249-260, 2013

Papers Published in Refereed Scientific Meetings

I. **Performance Evaluations of Meta-Heuristic Algorithms On Solving Group Elevator Control Problem**

USTA A., ATİLA Ü., AKYOL K., BAYDİLLİ Y. Y.

International Conference on Advanced Technologies, Computer Engineering and Science (ICATCES 2019), ALANYA, Turkey, 26 - 28 April 2019, pp.90-94

II. **Improving classification performance on microscopic images using Generative Adversarial Networks (GAN)**

BAYDİLLİ Y. Y., ATİLA Ü., AKYOL K.

International Conference on Advanced Technologies, Computer Engineering and Science (ICATCES 2019), ALANYA, Turkey, 26 - 28 April 2019, pp.1-6

III. **LPG ile Çalışan Bir Motorda Emisyon Değerlerinin Yapay Sinir Ağları ile Tahmin Edilmesi**

DURAN İ. U., ATİLA Ü., BALKİ M. K., ŞAHİN İ.

III. Uluslararası Endüstriyel Tasarım ve Mühendislik Sempozyumu (ISIDE 2018), Antalya, Turkey, 22 - 24 November 2018, pp.474-478

IV. **Understanding effects of hyper-parameters on learning: A comparative analysis**

BAYDİLLİ Y. Y., ATİLA Ü.

International Conference on Advanced Technologies, Computer Engineering and Science (ICATCES 2018), Karabük, Turkey, 11 - 13 May 2018, pp.814-817

V. **Karabük İli Hava Kirletici PM10 Gösterge Seviyesinin Yapay Sinir Ağı ve Çoklu Regresyon Yöntemleriyle Tahmin Edilmesi**

KARAOĞLAN K. M., ATİLA Ü., KURTGÖZ Y., FINDIK O.

20. Akademik Bişim 2018 Konferansı, Karabük, Turkey, 31 January - 02 February 2018, pp.164-170

VI. **Yapay Sinir Ağları Kullanılarak Yükseköğretimde Öğrenci Adaylarının Başarı Durumlarının Tahmin Edilmesi**

ÇİZMECİ H., ATİLA Ü., KARAŞ İ. R.

20. Akademik Bişim 2018 Konferansı, Karabük, Turkey, 31 January - 02 February 2018, pp.183-186

VII. **ROI Detection and Vessel Segmentation in Retinal Image**

SABAZ F., ATİLA Ü.

4th International GeoAdvances Workshop, Karabük, Turkey, 14 - 15 October 2017, pp.85-89

VIII. **Comparison of a Smart Mobile Application-Supported Evacuation System and Traditional Evacuation Systems**
ORTAKCI Y., ATİLA Ü., DEMİRAL E., ÖZACAR K., KARAŞ İ. R.
1st International IAG Workshop on BIM and GIS Integration in 12th 3D Geoinfo Conference 2017, Melbourne, Australia, 25 - 27 October 2017

IX. **Comparison of Machine Learning Algorithms Used for Text Independent Speaker Recognition**
SARI Y., ATİLA Ü.
8th International Advanced Technologies Symposium (IATS'17), Elazığ, Turkey, 19 - 22 October 2017, pp.3410-3418

X. **Developing a 3D Routing Instruction Engine for Indoor Environment**
KARAŞ İ. R., ATİLA Ü., DEMİRAL E.
GRMSE: 4th International Conference on Geo-Informatics in Resource Management and Sustainable Ecosystem, ÇİN HALK CUMHURİYETİ HONG KONG ÖZEL İDARİ BÖLGESİ, 18 - 20 November 2016, pp.34-42

XI. **Saatlik ve Günlük Rüzgar Hızını Tahmin İçin Yeni Bir Analitik Yöntem Yaklaşımı ve Yapay Sinir Ağları ile Karşılaştırılması**
KÖSE B., ATİLA Ü., GÜNEŞER M. T., RECEBLİ Z.
10th International Clean Energy Symposium, İstanbul, Turkey, 24 - 26 October 2016, pp.928-938

XII. **Indoor Navigation Design Integrated With Smart Phones And Rfid Devices**
ORTAKCI Y., DEMİRAL E., ATİLA Ü., KARAŞ İ. R.
Joint International Geoinformation Conference 2015, Kuala-Lumpur, Malaysia, 28 - 30 October 2015, pp.223-226

XIII. **RFID-Based Mobile Positioning And System Design For 3D Indoor Environment**
DEMİRAL E., KARAŞ İ. R., TURAN M. K., ATİLA Ü.
9th International 3D Geoinformation Conference, Dubai, United Arab Emirates, 11 - 13 November 2014

XIV. **A Knowledge Based Decision Support System: 3D GIS Implementation For Indoor Visualisation And Routing Simulation**
ATİLA Ü., KARAŞ İ. R., RAHMAN A. A.
Knowledge Management International Conference (KMICe) 2014, LANGKAWI, Malaysia, 12 - 15 August 2014, pp.968-971

XV. **Design Of An Intelligent Individual Evacuation Model For High Rise Building Fires Based On Neural Network Within The Scope Of 3D GIS**
ATİLA Ü., KARAŞ İ. R., TURAN M. K., RAHMAN A. A.
8th International 3D Geoinformation Conference (3DGeoInfo'13), İstanbul, Turkey, 27 - 29 November 2013, pp.13-24

XVI. **Kişiye Özel Akıllı Tahliye Modeli**
KARAŞ İ. R., ATİLA Ü., TURAN M. K.
Akıllı ve Yeşil Binalar Kongresi, Ankara, Turkey, 23 - 24 May 2013, pp.344-353

XVII. **A 3D-GIS implementation for realizing 3D network analysis and routing simulation for evacuation purpose**
ATİLA Ü., KARAŞ İ. R., RAHMAN A. A.
International Conference on 3D Geoinformation (7th 3DGeoinfo), Quebec, Canada, 16 - 17 May 2012, pp.249-260

XVIII. **Correction Of Faulty Lines In MUSCLE, To Be Used In 3D Building Network Construction**
KARAŞ İ. R., ATİLA Ü., RAHMAN A. A.
22nd International Society For Photogrammetry & Remote Sensing Congress, Melbourne, Australia, 25 August - 01 September 2012, pp.105-110

XIX. **Automatic Generation of 3D Networks in CityGML via MUSCLE Model**
ATİLA Ü., KARAŞ İ. R., RAHMAN A. A.
Joint ISG 2011 & ISPRS 2011 Conference, SELANGOR, Malaysia, 27 September - 29 November 2011

XX. **Design of a Route Guidance System with Shortest Driving Time Based on Genetic Algorithm**
ATİLA Ü., KARAŞ İ. R., GÖLOĞLU C., YAMAN B., ORAK İ. M.
10th WSEAS International Conference on Applied Computer and Applied Computational Science (ACACOS '11), Venice, Italy, 8 - 10 March 2011, pp.61-66

XXI. **Genetic Algorithm-Aided Routing On 3D Dynamic Networks**
ATİLA Ü., KARAŞ İ. R.
5th International 3D GeoInfo Conference, Berlin, Germany, 3 - 04 November 2010, pp.87-92

Metrics

Publication: 49
Citation (WoS): 398
Citation (Scopus): 850
H-Index (WoS): 7
H-Index (Scopus): 9

Non Academic Experience

MİLLİ EĞİTİM BAKANLIĞI BİLGİ İŞLEM DAİRESİ BAŞKANLIĞI, YAZILIM GELİŞTİRİCİ