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International Researcher IDs

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Education Information

Doctorate, Ege University, Fen Bilimleri Enstitüsü, Bilgi Teknolojileri (Dr), Turkey 2010 - 2018

Postgraduate, Ege University, Fen Bilimleri Enstitüsü, Bilgi Teknolojileri (YI) (Tezli), Turkey 2008 - 2010

Undergraduate, Doğu Akdeniz Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, Turkey 2004 - 2008

Dissertations

Doctorate, Bilişsel radyo ağlarında frekans atama, kanal zamanlama ve yönlendirme, Ege University, Fen Bilimleri Enstitüsü, Bilgi Teknolojileri (Dr), 2018

Postgraduate, Görevdeş ağlarda gecikme metriği tabanlı hiyerarşik katman geliştirme üzerine bir çalışma, Ege University, Fen Bilimleri Enstitüsü, Bilgi Teknolojileri (YI) (Tezli), 2010

Research Areas

Computer Sciences, algorithms, Computer Networks, Artificial Intelligence, Computer Learning and Pattern Recognition, Software

Academic Titles / Tasks

Assistant Professor, Ondokuz Mayıs University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2018 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Percentile-Based Adaptive Immune Plasma Algorithm and Its Application to Engineering Optimization**
ASLAN S., Demirci S., OKTAY T., Yesilbas E.
BIOMIMETICS, vol.8, no.6, 2023 (SCI-Expanded)
- II. **Difference-based firefly programming for symbolic regression problems**
Aliwi M., Demirci S., ASLAN S.
COMPUTER STANDARDS & INTERFACES, vol.86, 2023 (SCI-Expanded)
- III. **An improved immune plasma algorithm with a regional pandemic restriction**
ASLAN S., Demirci S.
SIGNAL IMAGE AND VIDEO PROCESSING, vol.16, no.8, pp.2093-2101, 2022 (SCI-Expanded)

- IV. **Channel Switching Cost-Aware Energy Efficient Routing in Cognitive Radio-Enabled Internet of Things**
Arat F., Demirci S.
MOBILE NETWORKS & APPLICATIONS, vol.27, no.4, pp.1531-1550, 2022 (SCI-Expanded)
- V. **Switching Cost-Aware Joint Frequency Assignment and Scheduling for Industrial Cognitive Radio Networks**
Demirci S., GÖZÜPEK KOCAMAN D.
IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS, vol.16, no.7, pp.4365-4377, 2020 (SCI-Expanded)
- VI. **Immune Plasma Algorithm: A Novel Meta-Heuristic for Optimization Problems**
Aslan S., Demirci S.
IEEE ACCESS, vol.8, pp.220227-220245, 2020 (SCI-Expanded)
- VII. **Energy and QoS Aware Analysis and Classification of Routing Protocols for IoT and WSN**
Arat F., Demirci S.
2020 7TH INTERNATIONAL CONFERENCE ON ELECTRICAL AND ELECTRONICS ENGINEERING (ICEEE 2020), pp.221-225, 2020 (SCI-Expanded)

Articles Published in Other Journals

- I. **Makine Öğrenmesi Tekniklerinin Sürüş Stili Sınıflandırmasında Kullanımı**
YILDIZ D., YILDIZ G., DEMİRCİ S.
Black Sea Journal of Engineering and Science, vol.7, no.4, pp.756-763, 2024 (Peer-Reviewed Journal)
- II. **Enhancing Wave Function Collapse Algorithm for Procedural Map Generation Problem**
Büyüksar O., YILDIZ D., DEMİRCİ S.
ENGINEERING SCIENCES, vol.13, no.3, pp.806-814, 2024 (Peer-Reviewed Journal)
- III. **Analysis of the varying packet sizes effect on energy consumption in cognitive radio networks**
Demirci S., Yıldız D.
ENGINEERING SCIENCES, vol.12, no.3, pp.644-655, 2023 (Peer-Reviewed Journal)
- IV. **Learning Based Yield Forecasting for Hazelnut Production**
Yıldız D., Yıldız G., Demirci S.
Black Sea Journal of Engineering and Science, vol.6, no.2, pp.117-126, 2023 (Peer-Reviewed Journal)
- V. **Büyük Veri Optimizasyonu için Kaynak-Bağlantılı Harmoni Arama Algoritmasının Performans Analizi**
İleri S. C., ASLAN S., DEMİRCİ S.
Bilgisayar Bilimleri ve Mühendisliği Dergisi, vol.15, 2022 (Peer-Reviewed Journal)
- VI. **Comparison of Optimization Algorithms on Finding Optimum Location for Mobile Aerial Base Station**
İLERİ S. C., ASLAN S., DEMİRCİ S.
Bilgisayar Bilimleri ve Mühendisliği Dergisi, vol.14, no.1, pp.68-76, 2021 (Peer-Reviewed Journal)
- VII. **Experimental Analysis of Energy Efficient and QoS Aware Objective Functions for RPL Algorithm in IoT Networks**
ARAT F., DEMİRCİ S.
Sakarya University Journal of Computer and Information Sciences (Online), vol.4, no.2, pp.192-203, 2021 (Peer-Reviewed Journal)
- VIII. **İmmün Plazma Algoritması ile Bilişsel Radyo Ağlarında Çok Kullanıcılı Kanal Atama Probleminin Çözülmesi**
Kısa M., ASLAN S., DEMİRCİ S.
Avrupa Bilim ve Teknoloji Dergisi, 2021 (Peer-Reviewed Journal)
- IX. **Performance Analysis of Immune Plasma Algorithm with Different Donor-Receiver Configurations**
DURAKI S., ASLAN S., DEMİRCİ S.
Avrupa Bilim ve Teknoloji Dergisi, 2021 (Peer-Reviewed Journal)
- X. **Çok Ölçekli Eğrilik Sınıflandırmasının CUDA ile Hızlandırılması**
Oğuz M., DEMİRCİ S.

Books & Book Chapters

- I. **OMNeT++ Framework for Simulation of Centralized and Distributed Algorithms in Multi-Hop Networks**
DEMİRCİ S., İleri S. C., DURAKI S.
in: Handbook of Research on Advances in Data Analytics and Complex Communication Networks, P. Venkata Krishna (Sri Padmavati Mahila University, India), Editor, IGI Global, pp.1-33, 2022
- II. **Android-Based Skin Cancer Recognition System Using Convolutional Neural Network**
DEMİRCİ S., ŞAHİN D. Ö., İbrahim Halil T.
in: Diagnostic Applications of Health Intelligence and Surveillance Systems, Divakar Yadav, Abhay Bansal, Madhulika Bhatia, Madhurima Hooda, Jorge Morato, Editor, IGI Global, pp.59-85, 2021

Refereed Congress / Symposium Publications in Proceedings

- I. **Protocol Stack-Aware Comparison of Centroid Localization Algorithms Based on Anchor Density Using Cooja**
Turan İ. H., Yıldız D., Demirci S.
2023 International Conference on Smart Applications, Communications and Networking (SmartNets), İstanbul, Turkey, 25 - 27 July 2023, pp.1-6
- II. **Performance Investigation of Immune Plasma Algorithm on Solving Wireless Sensor Deployment Problem**
Tasdemir A., Demirci S., ASLAN S.
9th International Conference on Electrical and Electronics Engineering (ICEEE), Alanya, Turkey, 29 - 31 March 2022, pp.296-300
- III. **A Novel Harmony Search Based Method for Noise Minimization on EEG Signals**
İleri S. C., ASLAN S., DEMİRCİ S.
6th International Conference on Computer Science and Engineering (UBMK), 15 September 2021
- IV. **Solving Channel Assignment Problem in Cognitive Radio Networks with Immune Plasma Algorithm**
Kısa M., DEMİRCİ S., ARSLAN S., ASLAN S.
6th International Conference on Computer Science and Engineering (UBMK), 15 September 2021
- V. **A novel objective function for frequency switching cost aware RPL algorithm**
Arat F., Demirci S.
2021 International Conference on INnovations in Intelligent SysTems and Applications, INISTA 2021, Kocaeli, Turkey, 25 - 27 August 2021
- VI. **Performance investigation of parallel immune plasma algorithm**
ASLAN S., Demirci S.
2021 International Conference on INnovations in Intelligent SysTems and Applications, INISTA 2021, Kocaeli, Turkey, 25 - 27 August 2021
- VII. **Solving Channel Assignment Problem in Cognitive Radio Networks with Immune Plasma Algorithm**
Immun Plazma Algoritması ile Bilişsel Radyo Ağılannda Kanal Atama Probleminin Cözülmesi
Kısa M., Demirci S., ARSLAN S., ASLAN S.
6th International Conference on Computer Science and Engineering, UBMK 2021, Ankara, Turkey, 15 - 17 September 2021, pp.818-822
- VIII. **A Novel Harmony Search Based Method for Noise Minimization on EEG Signals EEG Sinyallerinde Gürültü Minimizasyonu için Harmoni Arama Temelli Yeni Bir Yöntem**
Celil S., ASLAN S., Demirci S.
6th International Conference on Computer Science and Engineering, UBMK 2021, Ankara, Turkey, 15 - 17

September 2021, pp.747-750

- IX. **Energy and QoS Aware Analysis and Classification of Routing Protocols for IoT and WSN**
Arat F., Demirci S.
7th International Conference on Electrical and Electronics Engineering, ICEEE 2020, Antalya, Turkey, 14 - 16 April 2020, pp.221-225
- X. **Spam Filtering with KNN: Investigation of the Effect of k Value on Classification Performance**
Şahin D. Ö., Demirci S.
28th Signal Processing and Communications Applications Conference (SIU), ELECTR NETWORK, 5 - 07 October 2020
- XI. **Firefly Programming For Symbolic Regression Problems**
Aliwi M., ASLAN S., Demirci S.
28th Signal Processing and Communications Applications Conference (SIU), ELECTR NETWORK, 5 - 07 October 2020
- XII. **Comparison of Term Weighting Techniques in Spam SMS Detection**
Kural O. E., Demirci S.
28th Signal Processing and Communications Applications Conference (SIU), ELECTR NETWORK, 5 - 07 October 2020
- XIII. **UAV Placement with Animal Migration Optimization Algorithm**
Duraki S., Demirci S., Aslan S.
28th Telecommunications Forum (TELFOR), Belgrade, Serbia, 24 - 25 November 2020, pp.53-56
- XIV. **Solving UAV Localization Problem with Firefly Algorithm**
Aliwi M., ASLAN S., Demirci S.
28th Signal Processing and Communications Applications Conference (SIU), ELECTR NETWORK, 5 - 07 October 2020
- XV. **Finding Optimum Location for a Mobile Aerial Base Station with Harmony Search Algorithm**
İleri S. C., ASLAN S., Demirci S.
5th International Conference on Computer Science and Engineering (UBMK), Diyarbakır, Turkey, 9 - 11 September 2020, pp.224-227
- XVI. **A Mobile Application for Wireless Attendance System**
Duraki S., Mehrat A., Demirci S.
1st International Informatics and Software Engineering Conference, IISEC 2019, Ankara, Turkey, 6 - 07 November 2019
- XVII. **Performance Analysis of Parallel Differential Evolution Algorithm with Cooperative Emigrant Creation Strategy Kooperatif Göçmen Üretim Stratejisi Destekli Paralel Diferansiyel Gelişim Algoritmasının Performans Analizi**
Demirci S., ASLAN S., İleri S. C.
1st International Informatics and Software Engineering Conference, IISEC 2019, Ankara, Turkey, 6 - 07 November 2019
- XVIII. **Survey of Network Security Issues and Solutions for the IoT**
Murzaeva A., Kepceoglu B., Demirci S.
3rd International Symposium on Multidisciplinary Studies and Innovative Technologies, ISMSIT 2019, Ankara, Turkey, 11 - 13 October 2019
- XIX. **Konferans, Kongre ve Sempozyum Yönetim Sistemleri için Bir Mobil İstemci Uygulama**
İLERİ S. C., ASLAN S., DEMİRCİ S.
13. Uusal Yazılım Mühendisliği Sempozyumu (UYMS-2019), İzmir, Turkey, 23 - 25 September 2019, pp.15
- XX. **Analysis of Spectrum Aware Routing Algorithms in CR Based IoT Devices**
Arat F., Demirci S.
4th International Conference on Computer Science and Engineering (UBMK), Samsun, Turkey, 11 - 15 September 2019, pp.751-756
- XXI. **Performing energy consuming attacks on IoT devices**
Kepceoglu B., Murzaeva A., Demirci S.

27th Telecommunications Forum (TELFOR), Belgrade, Serbia, 26 - 27 November 2019, pp.185-188

XXII. Solving UAV Localization Problem with Artificial Bee Colony (ABC) Algorithm

Aslan S., Demirci S.

4th International Conference on Computer Science and Engineering (UBMK), Samsun, Turkey, 11 - 15 September 2019, pp.735-738

XXIII. A Novel ZigBee Based Mobile Fingerprint Student Attendance System

Tok H., Batur N. S., Tuzen R., Yildirim H. I., Demirci S.

4th International Conference on Computer Science and Engineering (UBMK), Samsun, Turkey, 11 - 15 September 2019, pp.492-497