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Education Information

I. Doctorate, Erciyes University, Fen Bilimleri Ens., Bilgisayar Müh. A.B.D., Turkey 2004 - 2011
II. Postgraduate, Erciyes University, Fen Bilimleri Ens., Bilgisayar Müh. A.B.D., Turkey 2001 - 2003
III. Undergraduate, Erciyes University, Mühendislik Fak., Bilgisayar Müh. Böl., Turkey 1996 - 2001

Foreign Languages

I. English, C1 Advanced

Certificates, Courses and Trainings

I. IT, Cisco Networking, CCNA Instructor Training Program, Youth for Habitat and ITU, 2005

Dissertations

I. Doctorate, KABLOSUZ ALGILAYICI AĞLARINDA ZEKİ YÖNLENDİRME TEKNİKLERİ, Erciyes Üniversitesi, Fen Bilimleri Ens., Bilgisayar Müh. A.B.D., 2011
II. Postgraduate, DİSK PLANLAMA İÇİN KARINCA KOLONİ ALGORİTMASINA DAYALI YENİ BİR METOD, Erciyes Üniversitesi, Fen Bilimleri Ens., Bilgisayar Müh. A.B.D., 2003

Research Areas

Computer Sciences, Computer Networks, Communications and Network Protocols, Equipment, Network Architecture, Logic Design, Software, Operating Systems, Engineering and Technology

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Indoor Localization with an Autoencoder based Convolutional Neural Network**
ARSLANTAŞ H., ÖKDEM S.
IEEE Access, vol.12, pp.46059-46066, 2024 (SCI-Expanded)

II. **Finding the optimum parameter values of the round robin CPU scheduling algorithm with genetic algorithm**
ÖKDEM S., Kosmaz B.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.36, no.2, pp.1013-1027, 2021 (SCI-Expanded)

III. **★Improving IEEE 802.15.4 channel access performance for IoT and WSN devices**
Gezer A., ÖKDEM S.
Computers and Electrical Engineering, vol.87, 2020 (SCI-Expanded)

IV. **A real-time noise resilient data link layer mechanism for unslotted IEEE 802.15.4 networks**
ÖKDEM S.
INTERNATIONAL JOURNAL OF COMMUNICATION SYSTEMS, vol.30, no.3, 2017 (SCI-Expanded)

V. **A cross-layer adaptive mechanism for low-power wireless personal area networks**
ÖKDEM S.
COMPUTER COMMUNICATIONS, vol.78, pp.16-27, 2016 (SCI-Expanded)

VI. **ADAPTIVE DATA SEQUENCE GENERATOR FOR NOISY SIGNALS IN LOW RATE WIRELESS PERSONAL AREA NETWORKS**
ARSLAN S., ÖKDEM S.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.30, no.3, pp.371-380, 2015 (SCI-Expanded)

VII. **Cluster based wireless sensor network routing using artificial bee colony algorithm**
KARABOĞA D., ÖKDEM S., ÖZTÜRK C.
WIRELESS NETWORKS, vol.18, no.7, pp.847-860, 2012 (SCI-Expanded)

VIII. **Routing in Wireless Sensor Networks Using an Ant Colony Optimization (ACO) Router Chip**
ÖKDEM S., KARABOĞA D.
SENSORS, vol.9, no.2, pp.909-921, 2009 (SCI-Expanded)

Articles Published in Other Journals

I. **Slotsuz IEEE 802.15.4 Ağlarda CSMA/CA Parametre Değerlerinin Hesabına Yönelik Monte Carlo Makinesinin Tasarımı**
ÖKDEM S.
GAZİ ÜNİVERSİTESİ FEN BİLİMLERİ DERGİSİ PART: C TASARIM VE TEKNOLOJİ, vol.5, no.2, pp.247-256, 2017 (Peer-Reviewed Journal)

II. **Optimal Disk Scheduling Based On Ant Colony Optimization Algorithm**
ÖKDEM S., KARABOĞA D.
Erciyes Universiy Journal of the Institute of Science and Technology, vol.22, pp.11-19, 2006 (Peer-Reviewed Journal)

III. **A Simple And Global Optimization Algorithm For Engineering Problems Differential Evolution Algorithm**
DERVIŞ K., ÖKDEM S.
Turkish Journal Of Electrical Engineering And Computer Sciences, vol.12, no.1, pp.53-60, 2004 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

I. **A Real-Time Link Quality Estimation Method for IEEE 802.15.4 Based Wireless Sensor Network and**

IoT Devices
ÖKDEM S., Shi H.
19th IEEE International Wireless Communications and Mobile Computing Conference, IWCMC 2023, Hybrid, Marrakesh, Morocco, 19 - 23 June 2023, pp.1-6

II. **Measuring IEEE 802.15.4 Protocol Performance over Embedded Control Systems**
ÖKDEM S., Aldabash O.
2019 International Conference on Artificial Intelligence and Data Processing Symposium, IDAP 2019, Malatya, Turkey, 21 - 22 September 2019

III. **AKADEMİK BENLİK KAVRAMI ÖLÇEĞİ UYGULAMASI İÇİN UZMAN SİSTEM TASARIMI**
Aruk İ., Ökdem S., Öztürk C.
III. ULUSLARARASI MESLEKİ VE TEKNİK BİLİMLER KONGRESİ, Gaziantep, Turkey, 21 - 22 June 2018, pp.361-366

IV. **Akademik Benlik Kavramı Ölçeği Uygulaması İçin Uzman Sistem Tasarımı**
İbrahim A., ÖKDEM S., ÖZTÜRK C.
III. Uluslararası Mesleki Ve Teknik Bilimler Kongresi, 21 - 22 June 2018

V.   **Kablosuz Ağlarda Şifreleme Algoritmalarının Performans Analizi**
Ökdem S., Kırtay M.
(ISAS 2018) 1st International Symposium on Innovative Approaches in Scientific Studies, Antalya, Turkey, 11 - 13 April 2018, pp.461-464

VI. **Design and Implementation of a Wireless Sensor Node for Real-time Monitoring Applications**
ÖKDEM S., Al-Azzawi O. I.
1st International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT 2017), Tokat, Turkey, 2 - 04 November 2017, pp.1-0

VII. **Kablosuz Vücut Alan Ağlarında Bulanık Mantık Yaklaşımı ile Yönlendirme İşlemleri**
ÖKDEM S., Arslantaş H.
2nci Uluslararası Bilgissayar Bilimleri ve Mühendisliği Konferansı (UBMK 2017), Antalya, Turkey, 5 - 08 October 2017, pp.796-0

VIII. **Routing Operations in Wireless Body Area Networks with Fuzzy Logic Approach**
ÖKDEM S., Arslantas H.
2017 International Conference on Computer Science and Engineering (UBMK), Antalya, Turkey, 5 - 08 October 2017, pp.764-768

IX. **Kablosuz Algılayıcı Ağ Yönlendirme Protokolleri İçin Geliştirilen Ayrık-Olay Tabanlı Benzetim Yazılımı**
ÖKDEM S., KARABOĞA D.
inet-tr'15 XX. Türkiye'de XX. İnternet Konferansı, İstanbul, Turkey, 1 - 03 December 2015, pp.1-8

X.   **Kablosuz Ağ Protokolleri İçin bir Benzetim Yazılımı**
ÖKDEM S., KARABOĞA D.
inet-tr'15 XX. Türkiye'de XX. İnternet Konferansı, İstanbul, Turkey, 1 - 03 December 2015, pp.1-8

XI. **MAC PERFORMANCE ANALYSIS OF IEEE 802.15.4 PROTOCOL WITH BCH CODING**
ÖKDEM S., Yalcin M.
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.1678-1681

XII. **Sera İklimlendirme Kontrolü İçin Etkin Bir Gömülü Sistem Tasarımı**
Öztürk N., ÖKDEM S., ÖZTÜRK S.
AB'14 XVI. Akademik Bilişim Konferansı, Mersin, Turkey, 5 - 07 February 2014, pp.1-7

XIII. **A Comparative Study on Differential Evolution Based Routing Implementations for Wireless Sensor Networks**
ÖKDEM S., ÖZTÜRK C., KARABOĞA D.
International Symposium on INnovations in Intelligent SysTems and Applications (INISTA 2012), Turkey, 1 - 04 July 2012, pp.1-5

XIV. **An Application of Wireless Sensor Network Routing based on Artificial Bee Colony Algorithm**
ÖKDEM S., KARABOĞA D., ÖZTÜRK C.

IEEE Congress on Evolutionary Computation (CEC), Louisiana, United States Of America, 5 - 08 June 2011, pp.326-330

XV. **Cluster based wireless sensor network routings using Artificial Bee Colony Algorithm**
KARABOĞA D., ÖKDEM S., ÖZTÜRK C.
IEEE 2010 International Conference on Autonomous and Intelligent Systems, AIS 2010, Povoa de Varzim, Portugal, 21 - 23 June 2010

XVI. **Kablosuz Algılayıcı Ağlarda Karınca Koloni Optimizasyonu Kullanılarak Yapılan Optimum Yönlendirme İşlemi**
KARABOĞA D., ÖKDEM S.
12. Ulusal Kongresi, Ankara, Turkey, 1 - 04 December 2009, pp.1-7

XVII. **Kablosuz Algılayıcı Ağlarında Yönlendirme Teknikleri**
ÖKDEM S., KARABOĞA D.
Akademik Bilişim' 07, Kütahya, Turkey, 1 - 04 February 2007, pp.409-415

XVIII. **Kablosuz Algılayıcı Ağlarında Güvenli İletişim Teknikleri**
KARABOĞA D., ÖKDEM S.
Ulusal Elektronik İmza Sempozyumu, Ankara, Turkey, 1 - 04 December 2006, pp.1-4

XIX. **Routing in Wireless Sensor Networks Using Ant Colony Optimization**
ÖKDEM S., KARABOĞA D.
1st NASA/ESA Conference on Adaptive Hardware and Systems, Turkey, 1 - 04 June 2006, pp.401-404

XX. **Gerçek Zamanlı Optimizasyon İçin Gelişime Dayalı Hızlı Bir Algoritma**
ÖKDEM S., KARABOĞA D.
Elektrik-Elektronik-Bilgisayar Mühendisliği 11. Ulusal Kongresi, İstanbul, Turkey, 1 - 04 September 2005, pp.527-530

XXI. **A Performance Comparison of Modern Heuristic Algorithms on Test Functions**
KARABOĞA D., ÖKDEM S.
International Symposium on Innovations in Intelligent Systems and Applications, Turkey, 1 - 04 June 2005, pp.46-49

XXII. **Çamaşır Makinesi için Akıllı Neuro-Fuzzy Mantık Kontrolör Tasarımı**
ÖKDEM S., KARABOĞA D., Başhan H.
Akıllı Sistemlerde Yenilikler ve Uygulamaları Sempozyumu, ASYU 2004, İstanbul, Turkey, 23 - 25 June 2004, pp.1-4

XXIII. **Disk Scheduling Using Ant Colony Algorithm**
KARABOĞA D., ÖKDEM S.
ICSP-International Conference on Signal Processing, Çanakkale, Turkey, 24 - 26 September 2003, pp.223-226

XXIV. **A Simple And Global Optimization Algorithm For Engineering Problems: Differential Evolution Algorithm**
KARABOĞA D., ÖKDEM S.
International XII. Turkish Symposium on Artificial Intelligence and Neural Networks, Çanakkale, Turkey, 1 - 04 July 2003, pp.581-583

XXV. **TOM ile Bilgisayar Laboratuvar Otomasyonu**
ÖKDEM S., Sağıroğlu Ş., KARABOĞA D.
10. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, SIU 2002, Denizli, Turkey, 12 - 14 June 2002, vol.1, pp.297-302

Supported Projects

I. ÖKDEM S., ARSLANTAŞ H., Project Supported by Higher Education Institutions, Bulanık Mantık le Kablosuz Vücut Alan Ağlarında Yönlendirme Metodunun Geliştirilmesi, 2016 - 2018

II. ÖKDEM S., ZORLU H., Project Supported by Other Official Institutions, Aktif İşgücü Piyasasına Uzman Teknik Ara Elemanlar (AKİPTE), 2008 - 2009

III. Toprak O., Ökdem S., Çoruh L., EU Supported Other Project, Technical Employee Training Project for the Actively

Challenging Job Market, 2008 - 2009

IV. KARABOĞA D., ÖKDEM S., Project Supported by Higher Education Institutions, KABLOSUZ ALGILAYICI AĞLARINDA OPTUMUM YÖNLENDİRME TEKNİKLERİ, 2006 - 2008

Scientific Refereeing

I. WIRELESS NETWORKS, SCI Journal, May 2019
II. APPLIED SOFT COMPUTING, SCI Journal, February 2019
III. WIRELESS NETWORKS, SCI Journal, January 2019
IV. SOFT COMPUTING, SCI Journal, January 2018
V. AD HOC NETWORKS, SCI Journal, December 2017
VI. Soft Computing, SCI Journal, June 2017
VII. Wireless Networks, SCI Journal, May 2017
VIII. IET Communications, SCI Journal, May 2017

Metrics

Publication: 37
Citation (WoS): 304
Citation (Scopus): 449
H-Index (WoS): 4
H-Index (Scopus): 5

Congress and Symposium Activities

I. XX. İnternet Konferansı, Attendee, İstanbul, Turkey, 2015
II. International Symposium on INnovations in Intelligent SysTems and Applications (INISTA 2012), Attendee, Trabzon, Turkey, 2012
III. International Conference on Autonomous and Intelligent Systems, Attendee, Porto, Portugal, 2011
IV. EMO 12. Ulusal Kongresi, Attendee, Ankara, Turkey, 2009
V. Akademik Bilişim' 07, Attendee, Kütahya, Turkey, 2007
VI. Ulusal Elektronik İmza Sempozyumu, Attendee, Ankara, Turkey, 2006
VII. 1st NASA/ESA Conference on Adaptive Hardware and Systems, Attendee, İstanbul, Turkey, 2006
VIII. Elektrik-Elektronik-Bilgisayar Mühendisliği 11. Ulusal Kongresi, Attendee, İstanbul, Turkey, 2005
IX. International Symposium on Innovations in Intelligent Systems and Applications'05, Attendee, İstanbul, Turkey, 2005
X. Akıllı Sistemlerde Yenilikler ve Uygulamaları Sempozyumu, Attendee, İstanbul, Turkey, 2004
XI. ICSP-International Conference on Signal Processing, Attendee, Çanakkale, Turkey, 2003
XII. International XII. Turkish Symposium on Artificial Intelligence and Neural Networks, Attendee, Çanakkale, Turkey, 2003
XIII. 10. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Attendee, Denizli, Turkey, 2002

Scholarships

I. Türk-Japon Vakfı Lisans Öğrenim Bursu, Other International Organizations, 1999 - 2000

Awards

I. Ökdem S., Onur Belgesi, Mezuniyet Derecesi, Dönem Birincisi, Erciyes Üniversitesi, Mühendislik Fakültesi, February 2021

Coaching Duties

Refereeing Duties

Non Academic Experience

I. Kumtel Day. Tük. Mal. Üretim ve Tic. Ltd. Şti.