

Prof. BAHRIYE AKAY

Personal Information

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Education Information

Post Doctorate, The University Of Birmingham, School Of Computer Science, Cerea, United Kingdom 2011 - 2012

Doctorate, Erciyes Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği Abd, Turkey 2005 - 2009

Postgraduate, Erciyes Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği Abd, Turkey 2003 - 2005

Undergraduate, Erciyes Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği, Turkey 1999 - 2003

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Nümerik Optimizasyon Problemlerinde Yapay Arı Kolonisi (Artificial Bee Colony) Algoritmasının Performans Analizi, Erciyes Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği Abd, 2009

Postgraduate, Bilgisayar Destekli Yöntemlerle Yüzdeki Dismorfik Rahatsızlıkların Otomatik Tespiti, Erciyes Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği Abd, 2005

Research Areas

Computer Sciences, Artificial Intelligence, Computer Learning and Pattern Recognition, Evolutionary Computing, Software, Software Engineering, Engineering and Technology

Academic Titles / Tasks

Professor, Erciyes University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2019 - Continues

Associate Professor, Erciyes University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2013 - 2019

Assistant Professor, Erciyes University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2009 - 2013

Research Assistant, Erciyes University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2004 - 2009

Academic and Administrative Experience

BİDEB Danışma Kurulu Üyesi, Erciyes Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2019 - Continues

Erciyes Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2015 - Continues

Erciyes Üniversitesi, Bilgisayar Bilimleri Uygulama Ve Araştırma Merkezi, 2016 - 2019

Courses

Bilimsel Programlama, Undergraduate, 2015 - 2016
Kombinasyonel Optimizasyon, Postgraduate, 2015 - 2016
Bilgisayar Programlama 2, Undergraduate, 2014 - 2015
Uygulamalı Sayısal Yöntemler, Postgraduate, 2015 - 2016
Nesne Yönelimli Programlama, Undergraduate, 2015 - 2016
Sistem Analizi, Undergraduate, 2013 - 2014

Advising Theses

Akay B., Nesne Yönelimli Yazılımlar ve RESTful Web Servisler için Yapay Arı Kolonisi Temelli Yazılım Test Yöntemleri Geliştirilmesi, Doctorate, Ö.ŞAHİN(Student), 2020
Akay B., Yapay zeka algoritmaları ile kriptoanaliz, Doctorate, A.KH(Student), 2020
Akay B., YAPAY ARI KOLONİSİ TEMELLİ LOJİSTİK REGRESYON SINIFLAYICILARIN OPTİMAL TASARIMI VE TÜRKÇE SPAM MAİLLERİN FİLTRELENMESİNDE BAŞARIMLARININ İNCELENMESİ, Doctorate, B.KAĞAN(Student), 2020
Akay B., İNSAN AKTİVİTESİ TANIMAYA YÖNELİK BÜYÜK VERİ SETLERİNDE KÜMELEME YÖNTEMLERİNİN BULUT ÜZERİNDE PARALELLEŞTİRİLMESİ, Doctorate, A.ABDULRAHMAN(Student), 2020
Akay B., Yapay Arı Koloni Algoritmasının Sınırlamalı Optimizasyon Problemleri Üzerinde Performans Analizi, Postgraduate, D.ALICI(Student), 2019
AKAY B., An Investigation of Wireless Sensor Network Localization Techniques, Postgraduate, L.Jasim(Student), 2017
AKAY B., Minimum Spanning Tree Construction using Meta-heuristics, Postgraduate, N.Abdulkareem(Student), 2017
AKAY B., Yazılım Test Verisi Üretiminde Yapay Zeka Tekniklerinin Performans Analizi, Postgraduate, Ö.Şahin(Student), 2016
AKAY B., Kriptoloji Yöntemlerinin Karşılaştırılması, Postgraduate, Z.Hashim(Student), 2016
AKAY B., Yapay Zeka Yekniklerinin Renk Haritası İndirgemedde Kullanılması, Postgraduate, K.Demir(Student), 2013

Jury Memberships

Post Graduate, Tez Savunma Jürisi, Erciyes Üniversitesi, May, 2010

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **A survey on the Artificial Bee Colony algorithm variants for binary, integer and mixed integer programming problems**
AKAY B., KARABOĞA D., GÖRKEMLİ B., Kaya E.
Applied Soft Computing, vol.106, 2021 (Journal Indexed in SCI)
- II. **Archive-based multi-criteria Artificial Bee Colony algorithm for whole test suite generation**
ŞAHİN Ö., AKAY B., KARABOĞA D.
Engineering Science and Technology, an International Journal, vol.24, pp.806-817, 2021 (Journal Indexed in SCI)
- III. **A Discrete Dynamic Artificial Bee Colony with Hyper-Scout for RESTful web service API test suite generation**
ŞAHİN Ö., AKAY B.
Applied Soft Computing, vol.104, 2021 (Journal Indexed in SCI)
- IV. **A comprehensive survey on optimizing deep learning models by metaheuristics**
AKAY B., KARABOĞA D., AKAY R.

ARTIFICIAL INTELLIGENCE REVIEW, 2021 (Journal Indexed in SCI)

- V. **A survey on the Metaheuristics for Cryptanalysis of Substitution and Transposition Ciphers**
Sabonchi A. K. S. , AKAY B.
COMPUTER SYSTEMS SCIENCE AND ENGINEERING, vol.39, no.1, pp.87-106, 2021 (Journal Indexed in SCI)
- VI. **A Binomial Crossover Based Artificial Bee Colony Algorithm for Cryptanalysis of Polyalphabetic Cipher**
Sabonchi A. K. S. , AKAY B.
TEHNICKI VJESNIK-TECHNICAL GAZETTE, vol.27, no.6, pp.1825-1835, 2020 (Journal Indexed in SCI)
- VII. **Human Activity Recognition Based on Parallel Approximation Kernel K-Means Algorithm**
Jamel A. A. M. , Akay B.
Computer Systems Science And Engineering, vol.35, no.6, pp.441-456, 2020 (Journal Indexed in SCI Expanded)
- VIII. **A comprehensive review of deep learning in colon cancer**
Pacal I., KARABOĞA D., BAŞTÜRK A., AKAY B., Nalbantoglu U.
COMPUTERS IN BIOLOGY AND MEDICINE, vol.126, 2020 (Journal Indexed in SCI)
- IX. **Cryptanalysis of Polyalphabetic Cipher Using Differential Evolution Algorithm**
Sabonchi A. K. S. , AKAY B.
TEHNICKI VJESNIK-TECHNICAL GAZETTE, vol.27, no.4, pp.1101-1107, 2020 (Journal Indexed in SCI)
- X. **Spam filtering using a logistic regression model trained by an artificial bee colony algorithm**
Dedetürk B. K. , AKAY B.
APPLIED SOFT COMPUTING, vol.91, 2020 (Journal Indexed in SCI)
- XI. **A Survey and Systematic Categorization of Parallel K-means and Fuzzy-c-Means Algorithms**
Jamel A. A. M. , AKAY B.
COMPUTER SYSTEMS SCIENCE AND ENGINEERING, vol.34, no.5, pp.259-281, 2019 (Journal Indexed in SCI)
- XII. **Application of artificial bee colony algorithm for maximizing heat transfer in a perforated fin**
Das R., Singh K., AKAY B., Gogoi T. K.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART E-JOURNAL OF PROCESS MECHANICAL ENGINEERING, vol.232, no.1, pp.38-48, 2018 (Journal Indexed in SCI)
- XIII. **Pareto front feature selection based on artificial bee colony optimization**
Hancer E., Xue B., Zhang M., Karaboga D., Akay B.
INFORMATION SCIENCES, vol.422, pp.462-479, 2018 (Journal Indexed in SCI)
- XIV. **Application of artificial bee colony algorithm for inverse modelling of a solar collector**
Das R., AKAY B., Singla R. K. , Singh K.
INVERSE PROBLEMS IN SCIENCE AND ENGINEERING, vol.25, no.6, pp.887-908, 2017 (Journal Indexed in SCI)
- XV. **Comparisons of metaheuristic algorithms and fitness functions on software test data generation**
ŞAHİN Ö., AKAY B.
APPLIED SOFT COMPUTING, vol.49, pp.1202-1214, 2016 (Journal Indexed in SCI)
- XVI. **A survey on the applications of artificial bee colony in signal, image, and video processing**
AKAY B., KARABOĞA D.
SIGNAL IMAGE AND VIDEO PROCESSING, vol.9, no.4, pp.967-990, 2015 (Journal Indexed in SCI)
- XVII. **The Artificial Bee Colony algorithm in layer optimization for the maximum fundamental frequency of symmetrical laminated composite plates**
APALAK M. K. , KARABOĞA D., AKAY B.
ENGINEERING OPTIMIZATION, vol.46, no.3, pp.420-437, 2014 (Journal Indexed in SCI)
- XVIII. **Synchronous and asynchronous Pareto-based multi-objective Artificial Bee Colony algorithms**
Akay B.
JOURNAL OF GLOBAL OPTIMIZATION, vol.57, no.2, pp.415-445, 2013 (Journal Indexed in SCI)
- XIX. **A study on particle swarm optimization and artificial bee colony algorithms for multilevel thresholding**
Akay B.
APPLIED SOFT COMPUTING, vol.13, no.6, pp.3066-3091, 2013 (Journal Indexed in SCI)
- XX. **Artificial bee colony algorithm for large-scale problems and engineering design optimization**

- AKAY B., KARABOĞA D.
JOURNAL OF INTELLIGENT MANUFACTURING, vol.23, no.4, pp.1001-1014, 2012 (Journal Indexed in SCI)
- XXI. **A modified Artificial Bee Colony algorithm for real-parameter optimization**
AKAY B., KARABOĞA D.
INFORMATION SCIENCES, vol.192, pp.120-142, 2012 (Journal Indexed in SCI)
- XXII. **Mix Proportioning of Aggregates for Concrete by Three Different Approaches**
HAKTANIR T., KARABOĞA D., AKAY B.
JOURNAL OF MATERIALS IN CIVIL ENGINEERING, vol.24, no.5, pp.529-537, 2012 (Journal Indexed in SCI)
- XXIII. **Modeling discharge-sediment relationship using neural networks with artificial bee colony algorithm**
KİSİ O., ÖZKAN C., AKAY B.
JOURNAL OF HYDROLOGY, vol.428, pp.94-103, 2012 (Journal Indexed in SCI)
- XXIV. **Neural networks with artificial bee colony algorithm for modeling daily reference evapotranspiration**
ÖZKAN C., KİSİ O., AKAY B.
IRRIGATION SCIENCE, vol.29, no.6, pp.431-441, 2011 (Journal Indexed in SCI)
- XXV. **Partial transmit sequences based on artificial bee colony algorithm for peak-to-average power ratio reduction in multicarrier code division multiple access systems**
TAŞPINAR N., KARABOĞA D., YILDIRIM M., AKAY B.
IET COMMUNICATIONS, vol.5, no.8, pp.1155-1162, 2011 (Journal Indexed in SCI)
- XXVI. **A modified Artificial Bee Colony (ABC) algorithm for constrained optimization problems**
KARABOĞA D., AKAY B.
APPLIED SOFT COMPUTING, vol.11, no.3, pp.3021-3031, 2011 (Journal Indexed in SCI)
- XXVII. **PAPR reduction using artificial bee colony algorithm in OFDM systems**
TAŞPINAR N., KARABOĞA D., YILDIRIM M., AKAY B.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.19, no.1, pp.47-58, 2011 (Journal Indexed in SCI)
- XXVIII. **Proportional-integral-derivative controller design by using artificial bee colony, harmony search, and the bees algorithms**
KARABOĞA D., AKAY B.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART I-JOURNAL OF SYSTEMS AND CONTROL ENGINEERING, vol.224, pp.869-883, 2010 (Journal Indexed in SCI)
- XXIX. **A comparative study of Artificial Bee Colony algorithm**
KARABOĞA D., AKAY B.
APPLIED MATHEMATICS AND COMPUTATION, vol.214, no.1, pp.108-132, 2009 (Journal Indexed in SCI)
- XXX. **A survey: algorithms simulating bee swarm intelligence**
KARABOĞA D., AKAY B.
ARTIFICIAL INTELLIGENCE REVIEW, vol.31, pp.61-85, 2009 (Journal Indexed in SCI)
- XXXI. **On the performance of artificial bee colony (ABC) algorithm**
Karaboga D., Basturk B.
APPLIED SOFT COMPUTING, vol.8, no.1, pp.687-697, 2008 (Journal Indexed in SCI)
- XXXII. **A powerful and efficient algorithm for numerical function optimization: artificial bee colony (ABC) algorithm**
Karaboga D., Basturk B.
JOURNAL OF GLOBAL OPTIMIZATION, vol.39, no.3, pp.459-471, 2007 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **A survey on the studies employing machine learning (ML) for enhancing artificial bee colony (ABC) optimization algorithm**
KARABOĞA D., AKAY B., KARABOĞA N.

Cogent Engineering, vol.7, no.1, pp.1855741, 2021 (Journal Indexed in ESCI)

- II. **Parameter Tuning of Artificial Bee Colony Algorithm Using Iterative F-Race Algorithm**
Şahin Ö., Akay B.
Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.37, no.1, pp.12-25, 2021 (National Refreed University Journal)
- III. **Sınırlama Ele Alış Metotlarının Yapay Arı Kolonisi Algoritması Üzerinde Etkisinin İncelenmesi**
ALICI KARACA D., AKAY B.
Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.36, no.3, pp.385-399, 2020 (Other Refereed National Journals)
- IV. **Artificial Bee Colony Algorithm Variants on Constrained Optimization**
AKAY B., KARABOĞA D.
International Journal of Optimization and Control: Theories & Applications, vol.7, no.1, 2017 (Refereed Journals of Other Institutions)
- V. **KLASİK KRİPTOLOJİ YÖNTEMLERİNİN KARŞILAŞTIRILMASI**
Z H O., A S., AKAY B.
e-Journal of New World Sciences Academy, vol.11, no.4, pp.100-108, 2016 (Refereed Journals of Other Institutions)

Books & Book Chapters

- I. **Artificial Bee Colony Algorithm and Its Application to Content Filtering in Digital Communication**
DEDETÜRK B. K. , AKAY B., KARABOĞA D.
in: Nature-Inspired Metaheuristic Algorithms for Engineering Optimization Applications, Carbas Serdar, Toktas Abdurrahim, Ustun Deniz, Editor, Springer Nature, pp.337-355, 2021
- II. **Artificial Bee Colony Algorithm and An Application to Software Defect Prediction**
Akay R., Akay B.
in: Metaheuristic Optimization Methods: Algorithms and Engineering Applications, Fouad Bennis,Rajib K Bhattacharjya, Editor, Springer, London/Berlin , Berlin, pp.73-92, 2020
- III. **Artificial Bee Colony - Modifications and An Application to Software Requirements Selection**
Akay B.
in: Swarm Intelligence Algorithms: Modifications and Applications, Adam Slowick, Editor, CRC, New York , Florida, pp.1-26, 2020
- IV. **Artificial Bee Colony Algorithm**
Akay B., Karaboğa D.
in: Swarm Intelligence Algorithms: A Tutorial, Adam Slowick, Editor, CRC, New York , Florida, pp.1-25, 2020
- V. **Artificial Bee Colony Algorithm Variants and Its Application to Colormap Quantization**
Akay B., Demir K.
in: Evolutionary and Swarm Intelligence Algorithms, Jagdish Chand Bansal,Pramod Kumar Singh,Nikhil R. Pal , Editor, Springer, London/Berlin , Berlin, pp.25-41, 2019
- VI. **Recent Advances in Evolutionary Algorithms for Job Shop Scheduling**
AKAY B., YAO X.
in: Automated Scheduling and Planning, E. Ozcan, N. Urquhart, S. Uyar, Editor, Springer-Verlag Gmbh- Berlin Heidelberg, Berlin, pp.191-224, 2013

Refereed Congress / Symposium Publications in Proceedings

- I. **Statistics based Cryptanalytic by Artificial Bee Colony Algorithm**
Sabonchi A., AKAY B.
The International Advanced Technologies Symposium, IATS17, 19 - 21 October 2017, pp.3874-3879

- II. **Cryptanalysis using Artificial Bee Colony Algorithm Guided by Frequency based Fitness Value**
Sabonchi A. K. S. , AKAY B.
1st International Symposium on Multidisciplinary Studies and Innovative Technologies, ISMSIT 2017, Tokat, Turkey, 2 - 04 November 2017, pp.334-338
- III. **An Investigation of Range-based Localization Methods in Wireless Sensor Networks**
Jasim L., AKAY B.
1st International Symposium on Multidisciplinary Studies and Innovative Technologies, ISMSIT 2017, Tokat, Turkey, 2 - 04 November 2017, pp.78-83
- IV. **Derin öğrenme tabanlı önerici sistemler (Deep learning based recommender systems)**
AKAY B., KAYNAR O., DEMİRKOPARAN F.
IEEE Conferences 2017 International Conference on Computer Science and Engineering (UBMK), Antalya, Turkey, Turkey, 5 - 08 October 2017, pp.645-648
- V. **Öğrenme-Öğretme Temelli ve Armoni Arama Algoritmaları ile Test Verisi Üretimi**
Akay B., Şahin Ö.
10. Ulusal Yazılım Mühendisliği Sempozyumu, Çanakkale, Turkey, 24 - 26 October 2016, pp.154-165
- VI. **Döngü İçeren Kod Parçaları için Test Verisi Üretiminde Meta-sezgisel Algoritmaların İncelemesi**
ŞAHİN Ö., AKAY B.
1st International Conference on Engineering Technology and Applied Sciences, Afyon, Turkey, 21 April - 22 October 2016, pp.362-369
- VII. **A multi-objective artificial bee colony approach to feature selection using fuzzy mutual information**
Hancer E., XUE B., ZHANG M., KARABOĞA D., AKAY B.
IEEE Congress on Evolutionary Computation, CEC 2015, Sendai, Japan, 25 - 28 May 2015, pp.2420-2427
- VIII. **İşlemci Çizelgelemesi için Karınca Koloni Yaklaşımı**
AKAY B., KARABOĞA D.
Akıllı Sistemlerde Yenilikler ve Uygulamaları (ASYU) 2012, Trabzon, Türkiye,, Trabzon, Turkey, 1 - 04 July 2012, pp.111-115
- IX. **Structural Optimization of Wavelet Packets using Swarm Algorithms**
AKAY B., KIRMIZI I.
IEEE International Conference on Fuzzy Systems (FUZZ-IEEE) / International Joint Conference on Neural Networks (IJCNN) / IEEE Congress on Evolutionary Computation (IEEE-CEC) / IEEE World Congress on Computational Intelligence (IEEE-WCCI), Brisbane, Australia, 10 - 15 June 2012
- X. **2-Opt Based Artificial Bee Colony Algorithm For Solving Traveling Salesman Problem**
AKAY B., AYDOĞAN E., KARACAN L.
2nd World Conference on Information Technology (WCIT-2011), Antalya, Turkey, Turkey, 1 - 04 November 2011, pp.666-672
- XI. **Wavelet Packets Optimization using Artificial Bee Colony Algorithm**
AKAY B., KARABOĞA D.
IEEE Congress on Evolutionary Computation (CEC), Louisiana, United States Of America, 5 - 08 June 2011, pp.89-94
- XII. **Solving Integer Programming Problems by Using Artificial Bee Colony Algorithm**
AKAY B., KARABOĞA D.
11th Congress of the Italian-Association-for-Artificial-Intelligence, Reggio Emilia, Italy, 9 - 12 December 2009, vol.5883, pp.355-364
- XIII. **Parameter Tuning for the Artificial Bee Colony Algorithm**
AKAY B., KARABOĞA D.
1st International Conference on Computational Collective IntelligenceWroclaw Univ Technol, Wroclaw, Poland, 5 - 07 October 2009, vol.5796, pp.608-619
- XIV. **Solving Large Scale Numerical Problems Using Artificial Bee Colony Algorithm**
KARABOĞA D., AKAY B.
Proceedings of 6th International Symposium on Intelligent and Manufacturing Systems, 6th Int. Symp. on Intelligent and Manufacturing Systems, Features, Strategies and Innovation, Sakarya, Turkiye,, Tunisia, 1 - 04 November 2008,

pp.401-410

- XV. **Artificial bee colony (ABC) optimization algorithm for training feed-forward neural networks**
KARABOĞA D., AKAY B., ÖZTÜRK C.
4th International Conference on Modeling Decisions for Artificial Intelligence, Kitakyushu, Japan, 16 August 2007 - 18 August 2008, vol.4617, pp.318-321
- XVI. **Training Neural Networks With ABC Optimization Algorithm On Medical Pattern Classification**
KARABOĞA D., ÖZTÜRK C., AKAY B.
International Conference on Multivariate Statistical Modelling & High Dimensional Data Mining, Kayseri, Türkiye,, Turkey, 1 - 04 June 2008, pp.31
- XVII. **Effect Of Region Scaling On The Initialization Of Particle Swarm Optimization, Differential Evolution And Artificial Bee Colony Algorithms On Multimodal High Dimensional Problems, Kayseri, Türkiye**
KARABOĞA D., AKAY B.
International Conference on Multivariate Statistical Modelling & High Dimensional Data Mining, Kayseri, Türkiye,, Turkey, 1 - 04 June 2008, pp.117
- XVIII. **Artificial Bee Colony Algorithm On Training Artificial Neural Networks**
KARABOĞA D., AKAY B.
IEEE 15th Signal Processing and Communications Applications, SIU 2007, Eskişehir, Türkiye,, Eskişehir, Turkey, 1 - 04 June 2007, pp.1-4
- XIX. **D. Karaboga, B. Basturk, Artificial Bee Colony (ABC) Optimization Algorithm For Solving Constrained Optimization Problems**
KARABOĞA D., AKAY B.
Advances in Soft Computing: Foundations of Fuzzy Logic and Soft Computing Lecture Notes in Computer Science Volume 4529/2007, 12th International Fuzzy Systems Association World Congress, IFSA 2007, Cancun, Mexico,, Mexico, 1 - 04 June 2007, pp.789-798
- XX. **An Artificial Bee Colony (ABC) Algorithm For Numeric Function Optimization**
AKAY B., KARABOĞA D.
Proceedings of IEEE SIS'06, IEEE Swarm Intelligence Symposium 2006,, United States Of America, 1 - 04 May 2006, pp.13-19
- XXI. **Yüz Tanıma Ile Havaalanı Personelinin Kimliklendirilmesi**
AKAY B., KARABOĞA D.
Hasem 06, Kayseri VI. Havacılık Sempozyumu, Nevşehir, Türkiye, Nevşehir, Turkey, 1 - 04 May 2006, pp.449-453
- XXII. **Image Segmentation Using Differential Evolution Algorithm**
KARABOĞA D., AKAY B.
Proceedings of the IEEE 13th Signal Processing and Communications Applications Conference,, Kayseri, Turkey, 1 - 04 May 2005, pp.33-36

Other Publications

- I. **Artificial Bee Colony (Abc), Harmony Search And Bees Algorithms On Numerical Optimization, Iproms 2009 Innovative Production Machines And -Systems Virtual Conference, Cardiff, UK.**
KARABOĞA D., AKAY B.
Other, pp.417-422, 2009

Supported Projects

Leblebicioğlu Kurtuluş İ., Yılmaz S., Kılıç K., Karaboğa D., Akay B., Nalbantoğlu Ö. U. , Durmaz Yılmaz Ö. M. , Baştürk A., TUBITAK Project, Dental Implant Sistemlerinin Tanınması İçin Derin Öğrenme Ağı Geliştirilmesi, 2021 - 2023
Genç M. S. , Genç G., Akay B., Selçuklu S. B. , Akarsu B., Azgın Ş. T. , AB IPA Project, Erciyes Üniversitesi Kampüsünde Enerji Verimliliği Önlemlerinin ve Uygulamalarının Öncelik Sıralamalarının Çok Amaçlı Optimizasyonu , 2020 - 2023

KARABOĞA D., AKAY B., KURBAN R., ÖZDEMİR Ö., YILMAZ M., SEKMEN U., İNCE A., Project Supported by Higher Education Institutions, DALGIÇ POMPA GRUPLARININ YAPAY ZEKA TEKNİKLERİ İLE ENERJİ VERİMLİLİĞİ OPTİMİZASYONU: GERMİRALTI KAPTAJ ALANI ÖRNEĞİ, 2020 - 2021

AKAY B., SABONCHI A. K. S. , Project Supported by Higher Education Institutions, Yapay Zeka Algoritmaları ile Kriptoanaliz, 2016 - 2020

AKAY B., TÜBİTAK Project, Optimize Edilmiş Sınıflayıcıların Tasarımı ve Türkçe Spam Mail Filtreleme Üzerinde Başarımlarının İncelenmesi, 2018 - 2019

AKAY B., ŞAHİN Ö., Project Supported by Higher Education Institutions, Yazılım Test Verisi Üretiminde Yapay Zeka Tekniklerinin İncelenmesi, 2016 - 2016

AKAY B., SABONCHI A. K. S. , OBAID Z. H. , Project Supported by Higher Education Institutions, Kriptoloji Yöntemlerinin Karşılaştırılması, 2016 - 2016

AKAY B., KARABOĞA D., Project Supported by Higher Education Institutions, Yapay Arı Kolonisi Algoritmasının Tek Modlu Sürekli Fonksiyonlar Üzerinde Hesaplama Karmaşıklığının Analizi, 2010 - 2014

KARABOĞA D., AYEN A., AKAY B., ÖZTÜRK İ. A. , Project Supported by Higher Education Institutions, Bal Arısı Algoritması İle Internet/Intranet Trafik Akışı Optimizasyonu, 2006 - 2008

KARABOĞA D., AKAY B., Project Supported by Higher Education Institutions, Bilgisayar Destekli Yöntemler İle Dismorfik Hastalıklara Otomatik Tanı Konması, 2005 - 2006

Patent

Akay B., Karaboğa D., Kurban R., Özdemir Ö., Sekmen U., İnce A., BİR DEN FAZLA POMPANIN ENERJİ VERİMLİLİĞİ ODAKLI OPTİMAL OLARAK BİR ARADA ÇALIŞTIRILMASI İÇİN YAPAY ARI KOLONİ ALGORİTMASI TEMELLİ BİR YÖNTEM VE BİR SU TEMİN SİSTEMİ, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Registration Number: 2020/22405 , Initial Registration, 2021

Activities in Scientific Journals

International Journal of Swarm Intelligence, Committee Member, 2012 - Continues

Memberships / Tasks in Scientific Organizations

TÜBİTAK BİDEB, Member of Advisory Board, 2019 - Continues

Scientific Refereeing

IEEE Transactions on Cybernetics, National Scientific Refreed Journal, December 2015

IEEE Transactions on Evolutionary Computation, National Scientific Refreed Journal, October 2015

Natural Computing, National Scientific Refreed Journal, August 2015

Scientific Research / Working Group Memberships

Intelligent Systems Research Group, ERCİYES ÜNİVERSİTESİ, Turkey, <http://mf.erciyes.edu.tr/abc>, 2005 - Continues

Citations

Total Citations (WOS):10808

h-index (WOS):22

Scholarships

2219- Yurt Dışı Doktora Sonrası Araştırma Burs Programı, TÜBİTAK, 2011 - Continues

Awards

Akay B., Most-Cited Scientists , Plos Biology, Mendeley, [Http://Dx.Doi.Org/10.17632/Btchxktzyw.1#File-51Ba39a5-4De9-4C79-B180-F0ca4d5747ed](http://dx.doi.org/10.17632/Btchxktzyw.1#File-51Ba39a5-4De9-4C79-B180-F0ca4d5747ed), August 2019

Akay B., Highly Cited Researcher, Clarivate Analytics (Web Of Science), November 2018

AKAY B., E-Devlet Yenilikçi Proje Yarışması, turkiye.gov.tr, May 2014