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### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAW-5335-2020

ScopusID: 23389512500

Yoksis Researcher ID: 55635

### Education Information

Doctorate, Gazi University, Fen Bilimleri, Elektrik Eğitimi, Turkey 2005 - 2009

Postgraduate, Gazi University, Fen Bilimleri, Elektrik Eğitimi, Turkey 2002 - 2004

Undergraduate, Gazi University, Teknik Eğitim, Elektrik Eğitimi, Turkey 1998 - 2002

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Education Management and Planning, Editör ve Yazar 6. Eğitim Semineri, TÜBİTAK, 2015

Education Management and Planning, AKADEMİK DÜZEYDE ARAŞTIRMA PROJESİ HAZIRLAMA EĞİTİMİ, TÜBİTAK, 2014

IT, Nesne Yönelimli Programlama Prensipleri ve Tasarım Desenleri, BT Akademi, 2007

IT, İleri ASP.NET MVC, BT Akademi, 2006

### Dissertations

Doctorate, Web-Tabanlı Uyarlanır Zeki Öğretim Sistemi Tasarımı Ve Uygulaması (Designing and Application of Web-Based Adaptive Intelligent Education System), Gazi University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi, 2009

Postgraduate, Otomatik Klima Tasarımı (Automatic Air Conditioner Control) , Gazi University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi, 2005

## Research Areas

Computer Sciences, algorithms, Artificial Intelligence, Computer Learning and Pattern Recognition, Software, Software Engineering, Industrial Engineering, Optimization Theory and Methods, Heuristic Methods, Engineering and Technology

## Academic Titles / Tasks

Professor, Karadeniz Technical University, Of Teknoloji Fakültesi, Yazılım Mühendisliği, 2006 - Continues

## Academic and Administrative Experience

Karadeniz Technical University, Teknoloji Fakültesi, Yazılım Mühendisliği, 2011 - Continues

## Courses

### Postgraduate

Design Patterns, Postgraduate, 2021 - 2022

Design of Meta-heuristic Search Algorithms, Postgraduate, 2022 - 2023

Sezgisel Optimizasyon, Postgraduate, 2017 - 2018

Yapay Zeka ve Uygulamaları, Postgraduate, 2015 - 2016

### Undergraduate

Veri madenciliği, Undergraduate, 2016 - 2017

Yapay Zeka ve Uygulamaları, Undergraduate, 2015 - 2016

Bilgisayar Programlama, Undergraduate, 2014 - 2015, 2013 - 2014

## Jury Memberships

Doctorate, Doktora Tez Savunma (Salih SÖYLER), Gazi Üniversitesi, May, 2018

Doctorate, Doktora Tez Savunma Jurisi, Gazi Üniversitesi, April, 2018

Doctorate, Doktora Tez Savunma Jurisi, Gazi Üniversitesi, March, 2018

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Metaheuristic search algorithms in frequency constrained truss problems: Four improved evolutionary algorithms, optimal solutions and stability analysis**  
Öztürk H. T., Kahraman H. T.  
APPLIED SOFT COMPUTING, 2025 (SCI-Expanded)
- II. **Dental X-Ray image enhancement using a novel evolutionary optimization algorithm**  
Yildirim İ., Bozkurt M. H., Kahraman H. T., Aras S.  
Engineering Applications of Artificial Intelligence, vol.142, 2025 (SCI-Expanded)
- III. **Metaheuristic search algorithms in real-time charge scheduling optimisation: A Suite of Benchmark Problems and Research on Stability-Analysis**  
Üstünsoy F., Sayan H. H., Kahraman H. T.  
APPLIED SOFT COMPUTING JOURNAL, vol.170, no.112691, pp.1-35, 2025 (SCI-Expanded)
- IV. **Dynamic switched crowding-based multi-objective particle swarm optimization algorithm for solving multi-objective AC-DC optimal power flow problem**  
Kahraman H. T.  
APPLIED SOFT COMPUTING, vol.166, 2024 (SCI-Expanded)
- V. **A clustering-based archive handling method and multi-objective optimization of the optimal power**

## **flow problem**

Akbel M., Kahraman H. T., Duman S., Temel S.

APPLIED INTELLIGENCE, vol.54, no.22, pp.11603-11648, 2024 (SCI-Expanded)

- VI. **A new evolutionary optimization algorithm with hybrid guidance mechanism for truck-multi drone delivery system**  
Yılmaz C., Cengiz E., Kahraman H. T.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.245, 2024 (SCI-Expanded)
- VII. **Dynamic-fitness-distance-balance stochastic fractal search (dFDB-SFS algorithm): an effective metaheuristic for global optimization and accurate photovoltaic modeling**  
Kahraman H. T., Hassan M. H., Kati M., Tostado-Véliz M., Duman S., Kamel S.  
SOFT COMPUTING, vol.28, no.9, pp.6447-6474, 2024 (SCI-Expanded)
- VIII. **Optimal solution of the combined heat and power economic dispatch problem by adaptive fitness-distance balance based artificial rabbits optimization algorithm**  
Ozkaya B., Duman S., Kahraman H. T., Guvenc U.  
Expert Systems with Applications, vol.238, 2024 (SCI-Expanded)
- IX. **Combined heat and power economic emission dispatch using dynamic switched crowding based multi-objective symbiotic organism search algorithm**  
Ozkaya B., Kahraman H. T., Duman S., Guvenc U., Akbel M.  
Applied Soft Computing, vol.151, 2024 (SCI-Expanded)
- X. **Fitness-distance balance based artificial ecosystem optimisation to solve transient stability constrained optimal power flow problem**  
Sonmez Y., Duman S., Kahraman H. T., Kati M., Aras S., Guvenc U.  
JOURNAL OF EXPERIMENTAL & THEORETICAL ARTIFICIAL INTELLIGENCE, vol.36, no.5, pp.745-784, 2024 (SCI-Expanded)
- XI. **Meta-heuristic search algorithms in truss optimization: Research on stability and complexity analyses**  
Öztürk H. T., Kahraman H. T.  
APPLIED SOFT COMPUTING, vol.145, 2023 (SCI-Expanded)
- XII. **Fitness-Distance-Constraint (FDC) based guide selection method for constrained optimization problems**  
Ozkaya B., Kahraman H. T., Duman S., Guvenc U.  
APPLIED SOFT COMPUTING, vol.144, 2023 (SCI-Expanded)
- XIII. **A novel optimal power flow model for efficient operation of hybrid power networks**  
Bakir H., Duman S., Güvenç U., Kahraman H. T.  
COMPUTERS AND ELECTRICAL ENGINEERING, vol.117, pp.1-20, 2023 (SCI-Expanded)
- XIV. **Detection of melanoma with hybrid learning method by removing hair from dermoscopic images using image processing techniques and wavelet transform**  
SUIÇMEZ Ç., Tolga Kahraman H. T., Suiçmez A., YILMAZ C., BALCI F.  
Biomedical Signal Processing and Control, vol.84, 2023 (SCI-Expanded)
- XV. **A SUPPLY CHAIN NETWORK DESIGN FOR BLOOD AND ITS PRODUCTS USING GENETIC ALGORITHM: A CASE STUDY OF TURKEY**  
Agac G., Baki B., Ar I. M., Kahraman H. T.  
JOURNAL OF INDUSTRIAL AND MANAGEMENT OPTIMIZATION, vol.19, no.7, pp.5407-5446, 2023 (SCI-Expanded)
- XVI. **A supply chain network design for blood and its products using genetic algorithm: A case study of Turkey**  
Ağaç G., Baki B., Ar İ. M., Kahraman H. T.  
JOURNAL OF INDUSTRIAL AND MANAGEMENT OPTIMIZATION, vol.19, no.7, pp.5407-5446, 2023 (SCI-Expanded)
- XVII. **Development of the Natural Survivor Method (NSM) for designing an updating mechanism in metaheuristic search algorithms**  
Kahraman H. T., Kati M., Aras S., Taşçı D. A.  
ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE, vol.122, 2023 (SCI-Expanded)

- XVIII. **Improved adaptive gaining-sharing knowledge algorithm with FDB-based guiding mechanism for optimization of optimal reactive power flow problem**  
Bakır H., Duman S., Guvenc U., Kahraman H. T.  
ELECTRICAL ENGINEERING, vol.106, no.10, pp.1-40, 2023 (SCI-Expanded)
- XIX. **Economical operation of modern power grids incorporating uncertainties of renewable energy sources and load demand using the adaptive fitness-distance balance-based stochastic fractal search algorithm**  
Duman S., Kahraman H. T., Kati M.  
ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE, vol.117, 2023 (SCI-Expanded)
- XX. **Optimal Power Flow for Hybrid AC/DC Electrical Networks Configured With VSC-MTDC Transmission Lines and Renewable Energy Sources**  
Bakır H., Guvenc U., Duman S., Kahraman H. T.  
IEEE SYSTEMS JOURNAL, vol.2, no.1, pp.1-12, 2023 (SCI-Expanded)
- XXI. **Unified space approach-based Dynamic Switched Crowding (DSC): A new method for designing Pareto-based multi/many-objective algorithms**  
Kahraman H. T., Akbel M., Duman S., Kati M., Sayan H. H.  
SWARM AND EVOLUTIONARY COMPUTATION, vol.75, 2022 (SCI-Expanded)
- XXII. **Optimal operation and planning of hybrid AC/DC power systems using multi-objective grasshopper optimization algorithm**  
Bakır H., Guvenc U., KAHRAMAN H. T.  
NEURAL COMPUTING & APPLICATIONS, vol.34, no.24, pp.22531-22563, 2022 (SCI-Expanded)
- XXIII. **A comprehensive performance analysis of meta-heuristic optimization techniques for effective organic rankine cycle design**  
Gürgen S., Kahraman H. T., Aras S., Altın İ.  
APPLIED THERMAL ENGINEERING, vol.213, 2022 (SCI-Expanded)
- XXIV. **Improved Lévy flight distribution algorithm with FDB-based guiding mechanism for AVR system optimal design**  
Bakır H., Guvenc U., Tolga Kahraman H. T., Duman S.  
Computers and Industrial Engineering, vol.168, 2022 (SCI-Expanded)
- XXV. **A powerful meta-heuristic search algorithm for solving global optimization and real-world solar photovoltaic parameter estimation problems**  
Duman S., KAHRAMAN H. T., SÖNMEZ Y., Guvenc U., Kati M., ARAS S.  
Engineering Applications of Artificial Intelligence, vol.111, 2022 (SCI-Expanded)
- XXVI. **Dynamic FDB selection method and its application: modeling and optimizing of directional overcurrent relays coordination**  
KAHRAMAN H. T., Bakır H., Duman S., Kati M., ARAS S., Guvenc U.  
APPLIED INTELLIGENCE, vol.52, no.5, pp.4873-4908, 2022 (SCI-Expanded)
- XXVII. **Optimization of Optimal Power Flow Problem Using Multi-Objective Manta Ray Foraging Optimizer**  
KAHRAMAN H. T., Akbel M., Duman S.  
Applied Soft Computing, vol.116, 2022 (SCI-Expanded)
- XXVIII. **Development of the Multi-Objective Adaptive Guided Differential Evolution and optimization of the MO-ACOPF for wind/PV/tidal energy sources**  
Duman S., Akbel M., KAHRAMAN H. T.  
Applied Soft Computing, vol.112, 2021 (SCI-Expanded)
- XXIX. **Fitness-Distance Balance based adaptive guided differential evolution algorithm for security-constrained optimal power flow problem incorporating renewable energy sources**  
Guvenc U., Duman S., KAHRAMAN H. T., ARAS S., Kati M.  
Applied Soft Computing, vol.108, 2021 (SCI-Expanded)
- XXX. **Development of a Lévy flight and FDB-based coyote optimization algorithm for global optimization and real-world ACOPF problems**  
Duman S., KAHRAMAN H. T., Guvenc U., ARAS S.

- Soft Computing, vol.25, pp.6577-6617, 2021 (SCI-Expanded)
- XXXI. **A novel stochastic fractal search algorithm with fitness-Distance balance for global numerical optimization**  
ARAS S., GEDİKLİ E., KAHRAMAN H. T.  
Swarm and Evolutionary Computation, vol.61, 2021 (SCI-Expanded)
- XXXII. **Fitness-distance balance (FDB): A new selection method for meta-heuristic search algorithms**  
Kahraman H. T., Aras S., Gedikli E.  
KNOWLEDGE-BASED SYSTEMS, vol.190, 2020 (SCI-Expanded)
- XXXIII. **Symbiotic organisms search algorithm for economic load dispatch problem with valve-point effect**  
Guvenc U., Dumana S., Sonmez Y., KAHRAMAN H. T., Dosoglu M. K.  
SCIENTIA IRANICA, vol.25, no.6, pp.3490-3506, 2018 (SCI-Expanded)
- XXXIV. **Symbiotic organisms search optimization algorithm for economic/emission dispatch problem in power systems**  
Dosoglu M. K., Guvenc U., Duman S., Sonmez Y., KAHRAMAN H. T.  
NEURAL COMPUTING & APPLICATIONS, vol.29, no.3, pp.721-737, 2018 (SCI-Expanded)
- XXXV. **Passive Mine Detection and Classification Method Based on Hybrid Model**  
Yilmaz C., KAHRAMAN H. T., Soyler S.  
IEEE ACCESS, vol.6, pp.47870-47888, 2018 (SCI-Expanded)
- XXXVI. **Symbiotic organisms search algorithm for dynamic economic dispatch with valve-point effects**  
Sonmez Y., KAHRAMAN H. T., Dosoglu M. K., Guvenc U., Duman S.  
JOURNAL OF EXPERIMENTAL & THEORETICAL ARTIFICIAL INTELLIGENCE, vol.29, no.3, pp.495-515, 2017 (SCI-Expanded)
- XXXVII. **Novel User Modeling Approaches for Personalized Learning Environments**  
KAHRAMAN H. T., SAĞIROĞLU Ş., Colak I.  
INTERNATIONAL JOURNAL OF INFORMATION TECHNOLOGY & DECISION MAKING, vol.15, no.3, pp.575-602, 2016 (SCI-Expanded)
- XXXVIII. **A novel and powerful hybrid classifier method: Development and testing of heuristic k-nn algorithm with fuzzy distance metric**  
KAHRAMAN H. T.  
DATA & KNOWLEDGE ENGINEERING, vol.103, pp.44-59, 2016 (SCI-Expanded)
- XXXIX. **Metaheuristic linear modeling technique for estimating the excitation current of a synchronous motor**  
Kahraman H. T.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.22, no.6, pp.1637-1652, 2014 (SCI-Expanded)
- XL. **A novel model for web-based adaptive educational hypermedia systems: SAHM (supervised adaptive hypermedia model)**  
KAHRAMAN H. T., Sagioglu S., Colak I.  
COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, vol.21, no.1, pp.60-74, 2013 (SCI-Expanded)
- XLI. **The development of intuitive knowledge classifier and the modeling of domain dependent data**  
KAHRAMAN H. T., Sagioglu S., Colak I.  
KNOWLEDGE-BASED SYSTEMS, vol.37, pp.283-295, 2013 (SCI-Expanded)
- XLII. **A new approach to predict the excitation current and parameter weightings of synchronous machines based on genetic algorithm-based k-NN estimator**  
KAHRAMAN H. T., Bayindir R., Sagioglu S.  
ENERGY CONVERSION AND MANAGEMENT, vol.64, pp.129-138, 2012 (SCI-Expanded)
- XLIII. **Application of the intuitive k-NN Estimator for prediction of the Marshall Test (ASTM D1559) results for asphalt mixtures**  
Aksoy A., İskender E., Kahraman H. T.  
CONSTRUCTION AND BUILDING MATERIALS, vol.34, pp.561-569, 2012 (SCI-Expanded)
- XLIV. **OBJECT ORIENTED AGGLOMERATIVE HIERARCHICAL CLUSTERING MODEL IN DATA MINING**

Yesilbudak M., KAHRAMAN H. T., Karacan H.

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.26, no.1, pp.27-39, 2011 (SCI-Expanded)

- XLV. TRANSITION TO ADAPTIVE EDUCATIONAL HYPERMEDIA SYSTEMS FROM WEB BASED EDUCATIONAL SYSTEMS: REVIEW OF DESIGN APPROACHES FOR THE AEHS**  
Sagioglu S., Colak I., Kahraman H. T.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.23, no.4, pp.837-852, 2008 (SCI-Expanded)
- XLVI. Remote controlling and monitoring of HVAC system over Internet**  
Colak I., Demirbas S., Sefa I., Irmak E., Kahraman H. T.  
JOURNAL OF SCIENTIFIC & INDUSTRIAL RESEARCH, vol.67, no.9, pp.680-684, 2008 (SCI-Expanded)

## Articles Published in Other Journals

- I. SINIFLANDIRMA PROBLEMLERİ İÇİN AGDE-TABANLI META-SEZGİSEL BOYUT İNDİRGE ME ALGORİTMASININ GELİŞTİRİLMESİ**  
KAHRAMAN H. T., ARAS B., YILDIZ O.  
Mühendislik Bilimleri ve Tasarım Dergisi, vol.8, no.5, pp.206-217, 2020 (Peer-Reviewed Journal)
- II. ÇOK AMAÇLI META-SEZGİSEL OPTİMİZASYON ALGORİTMALARININ PERFORMANSLARININ KARŞILAŞTIRILMASI**  
AKBEL M., KAHRAMAN H. T.  
Mühendislik Bilimleri ve Tasarım Dergisi, vol.8, no.5, pp.185-199, 2020 (Peer-Reviewed Journal)
- III. K-ORTALAMALAR TABANLI EN ETKİLİ META-SEZGİSEL KÜMELEME ALGORİTMASININ ARAŞTIRILMASI**  
Köroğlu Ö., KAHRAMAN H. T.  
Mühendislik Bilimleri ve Tasarım Dergisi, vol.8, no.5, pp.173-184, 2020 (Peer-Reviewed Journal)
- IV. ARZ-TALEP TABANLI OPTİMİZASYON ALGORİTMASININ FDB YÖNTEMİ İLE İYİLEŞTİRİLMESİ: MÜHENDİSLİK TASARIM PROBLEMLERİ ÜZERİNE KAPSAMLI BİR ARAŞTIRMA**  
KATI M., KAHRAMAN H. T.  
Mühendislik Bilimleri ve Tasarım Dergisi, vol.8, no.5, pp.156-172, 2020 (Peer-Reviewed Journal)
- V. Analysis, Test and Management of the Meta-Heuristic Searching Process: An Experimental Study on SOS**  
Kahraman H. T., Aras S., Sönmez Y., Güvenç U., Gedikli E.  
JOURNAL OF POLYTECHNIC-POLİTEKNİK DERGISI, vol.23, no.2, pp.445-455, 2020 (ESCI)
- VI. Rulet Elektromanyetik Alan Optimizasyon (R-EFO) Algoritması**  
KAHRAMAN H. T.  
Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.8, no.1, pp.69-80, 2020 (Peer-Reviewed Journal)
- VII. Artificial Neural Network-Based New Methodology for Modeling of Asphalt Mixtures and Comparison with IKE Method**  
İSKENDER E., AKSOY A., ÖZŞAHİN Ş., KAHRAMAN H. T., KONAK S. D.  
Journal of Investigations on Engineering & Technology, vol.1, no.2, pp.1-13, 2018 (Peer-Reviewed Journal)
- VIII. LAND COVER MAPPING WITH ADVANCED CLASSIFICATION ALGORITHMS**  
ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O., KAHRAMAN H. T.  
Nature Sciences, vol.13, no.3, pp.41-50, 2018 (Peer-Reviewed Journal)
- IX. LAND COVER MAPPING WITH ADVANCED CLASSIFICATION ALGORITHMS**  
ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O., KAHRAMAN H. T.  
Nature Sciences, vol.13, no.3, pp.41-50, 2018 (Peer-Reviewed Journal)
- X. An Estimate of Energy Consumption for Housing Buildings in Hot Climatic Zones through Artificial Intelligence Methods: Case of Antalya**  
Sümer Haydaraslan K., Haydaraslan E., Kahraman H. T., Yaşar Y.

- Technological Applied Sciences, vol.13, no.3, pp.273-284, 2018 (Peer-Reviewed Journal)
- XI. **LAND COVER MAPPING WITH ADVANCED CLASSIFICATION ALGORITHMS**  
ŞERİFOĞLU YILMAZ Ç., GÜNGÖR O., KAHRAMAN H. T.  
Nature Sciences, vol.13, no.3, pp.41-50, 2018 (Peer-Reviewed Journal)
- XII. **Meta-Sezgisel Arama Algoritmalarının Test Edilmesi İçin Yeni Yöntemlerin Geliştirilmesi**  
ARAS S., KAHRAMAN H. T., SÖNMEZ Y., GÜVENÇ U.  
İleri Teknoloji Bilimleri Dergisi, vol.6, no.2, pp.1-8, 2017 (Peer-Reviewed Journal)
- XIII. **Improvement of Buck Converter Performance Using Artificial Bee Colony Optimized PID Controller**  
SÖNMEZ Y., GÜVENÇ U., YILMAZ C., KAHRAMAN H. T., DUMAN S.  
Journal of Automation and Control Engineering, vol.4, pp.304-310, 2015 (Peer-Reviewed Journal)
- XIV. **Application of Meta-Heuristic Hybrid Artificial Intelligence Techniques for Modeling of Bonding Strength of Plywood Panels**  
DEMİRKİR C., KAHRAMAN H. T., ÇOLAKOĞLU G.  
Artvin Coruh University Journal of Forestry Faculty, vol.15, no.1, pp.20-32, 2014 (Peer-Reviewed Journal)
- XV. **A novel control system for air conditioners Klimalar için yeni bir kontrol sistemi**  
SEFA İ., KAHRAMAN H. T.  
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.22, no.3, pp.339-347, 2007 (Scopus)
- XVI. **Klimalar İçin Yeni Bir Kontrol Sistemi**  
SEFA İ., KAHRAMAN H. T.  
Gazi Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, vol.22, no.3, pp.339, 2007 (Scopus)

## Books

- I. **Multi-objective Adaptive Guided Differential Evolution for Multi-objective Optimal Power Flow Incorporating Wind-Solar-Small Hydro-Tidal Energy Sources**  
Kahraman H. T., Duman S.  
in: Differential Evolution: From Theory to Practice , B. Vinoth KumarDiego OlivaP. N. Suganthan, Editor, Springer, London/Berlin , Singapore, pp.341-365, 2022
- II. **Investigation of the Most Effective Meta-Heuristic Optimization Technique for Constrained Engineering Problems**  
KAHRAMAN H. T., ARAS S.  
in: Artificial Intelligence and Applied Mathematics in Engineering Problems, Hemanth, D., J., Editor, Springer, Cham, pp.484-501, 2020

## Papers Published in Refereed Scientific Meetings

- I. **Investigation of the Most Effective Meta-Heuristic Optimization Technique for Constrained Engineering Problems**  
KAHRAMAN H. T., ARAS S.  
International Conference on Artificial Intelligence and Applied Mathematics in Engineering (ICAIAME 2019), 20 - 22 April 2019
- II. **Pedestrian and Vehicles Detection with ResNet in Aerial Images**  
CENGİZ E., YILMAZ C., KAHRAMAN H. T., BAYRAM F.  
4th International Symposium on Innovative Approaches in Engineering and Natural Sciences Proceedings, Turkey, 22 - 24 November 2019, pp.416-419
- III. **Importance of Power Flow and Load Analysis in Pre-Installation Power Systems**  
CENGİZ E., YILMAZ C., YILMAZ E. N., KAHRAMAN H. T.  
2019 3rd International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), Ankara, Turkey, Turkey, 11 - 13 October 2019

- IV. **Comparison of Pooling Methods for Handwritten Digit Recognition Problem El Yazisi Rakam Tanıma Problemi için Havuzlama Yöntemlerinin Karşılaştırılması**  
Pala T., Güvenç U., KAHRAMAN H. T., Yücedağ I., SÖNMEZ Y.  
2018 International Conference on Artificial Intelligence and Data Processing, IDAP 2018, Malatya, Turkey, 28 - 30 September 2018
- V. **Meta-sezgisel Algoritmaların Çok Boyutlu Problem Uzaylarındaki Arama Performanslarının Araştırılması**  
Aras E., KAHRAMAN H. T., ARAS S.  
2018 International Conference on Artificial Intelligence and Data Processing, IDAP 2018, Malatya, Turkey, 28 - 30 September 2018
- VI. **Haar Wavelet Neural Network Model Haar Dalgacık Sinir Ağı Modeli**  
Pala T., Yücedağ I., KAHRAMAN H. T., Güvenç U., SÖNMEZ Y.  
2018 International Conference on Artificial Intelligence and Data Processing, IDAP 2018, Malatya, Turkey, 28 - 30 September 2018
- VII. **Disturbance Rejection Effect of PIDA Controller Designed via SOS Algorithm SOS Algoritması ile Tasarlanan PIDA Denetçinin Bozucu Bastırma Etkisi**  
Karadeniz E., ÖZBEY N., YEROĞLU C., KAHRAMAN H. T.  
2018 International Conference on Artificial Intelligence and Data Processing, IDAP 2018, Malatya, Turkey, 28 - 30 September 2018
- VIII. **META-SEZGİSEL ALGORİTMALARIN DENEYSEL ÇALIŞMALARINDAKİ STANDARTSIZLIKLAR VE ÇÖZÜM ÖNERİLERİ**  
KAHRAMAN H. T., ARAS S., GEDİKLİ E.  
INTERNATIONAL ACADEMIC RESEARCH CONGRESS, 30 October - 03 November 2018, pp.1466-1472
- IX. **META-SEZGİSEL OPTİMİZASYON ÇALIŞMALARINDA BENCHMARK PROBLEMLERİNDE KARŞILAŞILAN STANDARTSIZLIKLAR VE ÇÖZÜM ÖNERİLERİ**  
KAHRAMAN H. T., ARAS S., GEDİKLİ E.  
INTERNATIONAL ACADEMIC RESEARCH CONGRESS, 30 October - 03 December 2018, pp.1494-1501
- X. **Sanal Güç Santralleri ve Simülasyonu**  
YILMAZ C., SÖNMEZ Y., KAHRAMAN H. T., IŞIK M. F., uygun h. a.  
V. Uluslararası Multidisipliner Çalışmaları Sempozyumu, 16 - 17 November 2018, vol.2, pp.119-126
- XI. **Ethernet/GSM İle Uzaktan Kompanzasyon Takip Sistemi**  
YILMAZ C., IŞIK M. F., KAHRAMAN H. T., SÖNMEZ Y., Bilgi İ. A.  
V. Uluslararası Multidisipliner Çalışmaları Sempozyumu, 16 - 17 November 2018, vol.2, pp.127-130
- XII. **PID PARAMETRELERİNİN META SEZGİSEL YÖNTEMLERLE OPTİMİZASYONU**  
MARUL M., KAHRAMAN H. T.  
INTERNATIONAL CONFERENCE OF STRATEGIC RESEARCH ON SCIENTIFIC STUDIES AND EDUCATION, Antalya, Turkey, 19 - 21 October 2018
- XIII. **Haar Dalgacık Sinir Ağı**  
PALA T., YÜCEDAĞ İ., KAHRAMAN H. T., GÜVENÇ U., SÖNMEZ Y.  
International Conference on Artificial Intelligence and Data Processing (IDAP 2018), 28 - 30 September 2018, pp.59-66
- XIV. **SOS Algoritması ile Tasarlanan PIDA Denetçinin Bozucu Bastırma Etkisi**  
KARADENİZ E., ÖZBEY N., YEROĞLU C., KAHRAMAN H. T.  
International Conference on Artificial Intelligence and Data Processing (IDAP 2018), 28 - 30 September 2018
- XV. **El Yazısı rakam Tanıma Problemi İçin Havuzlama Yöntemlerinin Karşılaştırılması**  
PALA T., GÜVENÇ U., KAHRAMAN H. T., YÜCEDAĞ İ., SÖNMEZ Y.  
International Conference on Artificial Intelligence and Data Processing (IDAP 2018), 28 - 30 September 2018, pp.67-71
- XVI. **Fuel cost function parameter optimization by using gravitational search algorithm**  
SÖNMEZ Y., GÜVENÇ U., YILMAZ C., KAHRAMAN H. T.  
7 th International Conference on Advanced Technologies (ICAT'18), 28 April - 01 May 2018



- XVII. **Development and testing of meta heuristic regression tool**  
KAHRAMAN H. T., ARAS S., SÖNMEZ Y., GÜVENÇ U.  
7 th International Conference on Advanced Technologies (ICAT'18), 28 April - 01 May 2018
- XVIII. **Disturbance Rejection Effect of PIDA Controller Designed via SOS Algorithm**  
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International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 28 - 30 September 2018
- XIX. **Determination of the Effects of Penalty Coefficient on the Meta-Heuristic Optimization Process**  
ARAS S., KAHRAMAN H. T., GEDİKLİ E.  
International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 28 - 30 September 2018
- XX. **An Estimate of Energy Consumption for Housing Buildings in Hot Climatic Zones through Artificial Intelligence Methods: Case of Antalya**  
SÜMER HAYDARASLAN K., HAYDARASLAN E., KAHRAMAN H. T., YAŞAR Y.  
ICADET'17 International Conference on Advance Engineering Technologies, Bayburt, Turkey, 21 - 23 September 2017
- XXI. **Desen Tanıma Yöntemiyle Kara Mayınlarının Algılanması ve Sınıflandırılması**  
YILMAZ C., KAHRAMAN H. T., SÖNMEZ Y., SÖYLER S.  
IV. International Multidisciplinary Congress of Eurasia, 23 - 25 August 2017
- XXII. **MAYIN DEDEKTÖRÜ TEST SİMÜLATÖRÜ TASARIM VE UYGULAMASI**  
YILMAZ C., SÖYLER S., KAHRAMAN H. T., IŞIK M. F., SÖNMEZ Y.  
I. ULUSLARARASI TÜRK DÜNYASIMÜHENDİSLİK VE FEN BİLİMLERİ KONGRESİ, Antalya, Turkey, 7 - 10 December 2017, pp.198-202
- XXIII. **Meta-Sezgisel Algoritmelerde Tasarım Desenlerinin Keşfedilmesi**  
KAHRAMAN H. T., ARAS S., GÜVENÇ U., SÖNMEZ Y.  
International Engineering Research Symposium, Antalya, Turkey, 11 - 13 September 2017, pp.155-165
- XXIV. **Meta-Sezgisel Algoritmaların Geliştirilme ve Test Süreçlerinde Standartların Belirlenmesi**  
KAHRAMAN H. T., ONUR K., ARAS S., GÜVENÇ U.  
International Engineering Research Symposium, Antalya, Turkey, 11 - 13 September 2017, pp.108-110
- XXV. **Gömülü Patlayıcı Nesnelerin Tespitinde Yeni Bir Yöntem: Manyetik Anomali**  
SÖYLER S., YILMAZ C., KAHRAMAN H. T., SÖNMEZ Y.  
2.ULUSLARARASI SAVUNMA SANAYİ SEMPOZYUMU, Kırıkkale, Turkey, 6 - 08 April 2017, pp.174-181
- XXVI. **Exploring the Effect of Distribution Methods on Meta-Heuristic Searching process**  
KAHRAMAN H. T., ARAS S., GUVENC U., SONMEZ Y.  
2017 International Conference on Computer Science and Engineering (UBMK), Antalya, Turkey, 5 - 08 October 2017, pp.371-376
- XXVII. **Application of Symbiotic Organisms Search Algorithm to solve various economic load dispatch problems**  
GÜVENÇ U., DUMAN S., DÖŞOĞLU M. K., KAHRAMAN H. T., SÖNMEZ Y., YILMAZ C.  
2016 International Symposium on INnovations in Intelligent SysTems and Applications (INISTA), Sinaia, Romania, 2 - 05 August 2016
- XXVIII. **Enhancing Usability of Educational Adaptive Hypermedia Environments Development of Intelligent Authoring Tools**  
KAHRAMAN H. T., ÇOLAK İ., SAĞIROĞLU Ş.  
10th International Computer & Instructional Technologies Symposium ICITS2016, 16 - 18 May 2016, pp.1306-1317
- XXIX. **A Novel Adaptive Online Course on Electrical DC Motor Results of Experimental Research in Undergraduate Education**  
KAHRAMAN H. T., ÇOLAK İ., SAĞIROĞLU Ş.  
10th International Computer and Instructional Technologies Symposium (ICITS), 16 - 18 May 2016, pp.797-808
- XXX. **Optimal Scheduling of Short-term Hydrothermal Generation Using Symbiotic Organisms Search**

## **Algorithm**

KAHRAMAN H. T., Dosoglu M. K., GÜVENÇ U., Duman S., SÖNMEZ Y.

4th International Istanbul Smart Grid Congress and Fair (ICSG), İstanbul, Turkey, 20 - 21 April 2016, pp.60-64

- XXXI. **Applying the Meta-Heuristic Prediction Algorithm for Modeling Power Density in Wind Power Plant**  
KAHRAMAN H. T., Ayaz M., Colak I., BAYINDIR R.  
15th IEEE International Conference on Machine Learning and Applications (ICMLA), California, United States Of America, 18 - 20 December 2016, pp.447-451
- XXXII. **Developing of Decision Support System for Land Mine Classification by Meta-heuristic Classifier**  
YILMAZ C., KAHRAMAN H. T., Soyler S., SÖNMEZ Y., GÜVENÇ U.  
International Symposium on Innovations in Intelligent Systems and Applications (INISTA), Sinaia, Romania, 2 - 05 August 2016
- XXXIII. **A Comperative Study on Novel Machine Learning Algorithms for Estimation of Energy Performance of Residential Buildings**  
SÖNMEZ Y., GÜVENÇ U., KAHRAMAN H. T., YILMAZ C.  
3rd International Istanbul Smart Grid Congress and Fair (ICSG), İstanbul, Turkey, 29 - 30 April 2015
- XXXIV. **Modeling of meteorological parameters and improving the classification accuracy for the wind turbines**  
Colak I., DEMİRTAŞ M., KAHRAMAN H. T.  
21st International Symposium on Power Electronics, Electrical Drives, Automation and Motion, SPEEDAM 2012, Sorrento, Italy, 20 - 22 June 2012, pp.594-596
- XXXV. **Application of Adaptive Artificial Neural Network Method to Model the Excitation Currents of Synchronous Motors**  
BAYINDIR R., ÇOLAK İ., SAĞIROĞLU Ş., KAHRAMAN H. T.  
11th IEEE International Conference on Machine Learning and Applications (ICMLA), Florida, United States Of America, 12 - 15 December 2012, pp.498-502
- XXXVI. **An intelligent approach for speed stability analysis of a travelling wave ultrasonic motor based on genetic k-NN algorithm**  
Colak I., Yesilbudak M., SAĞIROĞLU Ş., KAHRAMAN H. T.  
2011 5th International Conference on Application of Information and Communication Technologies, AICT 2011, Baku, Azerbaijan, 12 - 14 October 2011
- XXXVII. **An intelligent decision support tool for a travelling wave ultrasonic motor based on k-nearest neighbor algorithm**  
SAĞIROĞLU Ş., KAHRAMAN H. T., Yesilbudak M., Colak I.  
10th International Conference on Machine Learning and Applications, ICMLA 2011, Honolulu, HI, United States Of America, 18 - 21 December 2011, vol.2, pp.308-312
- XXXVIII. **A novel intelligent decision support tool for average wind speed clustering**  
Colak I., Kabalci E., Yesilbudak M., KAHRAMAN H. T.  
8th International Conference on Power Electronics - ECCE Asia: "Green World with Power Electronics", ICPE 2011- ECCE Asia, Jeju, South Korea, 30 May - 03 June 2011, pp.2010-2014
- XXXIX. **Determining suitability of locations for installation of solar power station based on probabilistic inference**  
Colak I., SAĞIROĞLU Ş., DEMİRTAŞ M., KAHRAMAN H. T.  
9th International Conference on Machine Learning and Applications, ICMLA 2010, Washington, United States Of America, 12 - 14 December 2010, pp.714-719
- XL. **Development of adaptive and intelligent web based educational systems**  
KAHRAMAN H. T., SAĞIROĞLU Ş., ÇOLAK İ.  
2010 4th International Conference on Application of Information and Communication Technologies, Tashkent, Uzbekistan, 12 - 14 October 2010
- XLI. **Development of an Intelligent Decision Support System for Determining the Efficiency of Shunt Active Power Filter**  
SAĞIROĞLU Ş., BAYINDIR R., KAPLAN O., KAHRAMAN H. T.

2009 International Conference on Machine Learning and Applications, Miami, FL, USA, 13 - 15 December 2009, pp.626-631

**XLII. A Parameter Determination System for Wind Turbines Based On Naive Bayes Classification Algorithm**

Colak I., DEMİRTAŞ M., Bal G., KAHRAMAN H. T.

8th International Conference on Machine Learning and Applications, Florida, United States Of America, 13 - 15 December 2009, pp.611-616

**XLIII. Design of an Intelligent Decision Making System for a Travelling Wave Ultrasonic Motor**

Colak I., BAYINDIR R., KAHRAMAN H. T., Yesilbudak M.

8th International Conference on Machine Learning and Applications, Florida, United States Of America, 13 - 15 December 2009, pp.669-672

**XLIV. A User Modeling Approach to Web Based Adaptive Educational Hypermedia Systems**

Colak I., SAĞIROĞLU Ş., KAHRAMAN H. T.

7th International Conference on Machine Learning and Applications, California, United States Of America, 11 - 13 December 2008, pp.694-695

**XLV. A web based adaptive educational system**

Kahraman H. T., Colak I., Sagioglu S.

6th International Conference on Machine Learning and Applications, Ohio, United States Of America, 13 - 15 December 2007, pp.286-287

## Supported Projects

Kahraman H. T., TUBITAK Project, DIGITAL TWIN APPLICATIONS PROJECT FOR INDUSTRIAL ROBOTS AND CNC MACHINES, 2024 - 2025

## Student Project

R & D Project, design and implementation of a multilayer artificial intelligence based hybrid data completion algorithm, Karadeniz Technical University, Of Teknoloji Fakültesi, Yazılım Mühendisliği, Turkey, 2023 - 2024

R & D Project, Three Dimensional Design and Implementation of a Real World Routing Optimisation Algorithm for Spraying with Agricultural UAVs, Karadeniz Technical University, Of Teknoloji Fakültesi, Yazılım Mühendisliği, Turkey, 2023 - 2024

R & D Project, Modelling Search Characteristics of Meta-heuristic Search Algorithms, Karadeniz Technical University, Of Teknoloji Fakültesi, Yazılım Mühendisliği, Turkey, 2023 - 2024

R & D Project, Online Attendance System and Web Service Application with Face Recognition Using Deep Neural Network, Karadeniz Technical University, Of Teknoloji Fakültesi, Yazılım Mühendisliği, Turkey, 2023 - 2024

R & D Project, DESIGN OF AN EVOLUTIONARY NEURAL NETWORK IN PYTHON PLATFORM USING SOFTWARE DESIGN PRINCIPLES TO FACILITATE THE OPTIMISATION OF HYPERPARAMETERS, Karadeniz Technical University, Of Teknoloji Fakültesi, Yazılım Mühendisliği, Turkey, 2023 - 2024

R & D Project, Optimisation of Agricultural Spraying Problem with Unmanned Aerial Vehicle, Karadeniz Technical University, Of Teknoloji Fakültesi, Yazılım Mühendisliği, Turkey, 2022 - 2023

R & D Project, Research on Optimising the Archive-Population Interaction in Pareto-Based Evolutionary Multi-objective Optimisation Algorithms and Development of a New Method, Karadeniz Technical University, Of Teknoloji Fakültesi, Yazılım Mühendisliği, Turkey, 2022 - 2023

R & D Project, Design of meta-heuristic search algorithms for constrained engineering problems, Karadeniz Technical University, Of Teknoloji Fakültesi, Yazılım Mühendisliği, Turkey, 2022 - 2023

R & D Project, Design and Improvement of Archive Management and Population Update Mechanism in Pareto-Based Evolutionary Multi-objective Optimisation Algorithms with Non-Dominated Rankings, Karadeniz Technical University, Of Teknoloji Fakültesi, Yazılım Mühendisliği, Turkey, 2022 - 2023

## Activities in Scientific Journals

Engineering Applications Of Artificial Intelligence, Editor, 2022 - Continues

## Peer Reviews in Scientific Publications

IEEE Data and Knowledge, SCI Journal, March 2018

Knowledge Based Systems, SCI Journal, February 2018

IEEE Access, SCI Journal, January 2018

Knowledge-Based Systems, SCI Journal, January 2015

IET, Generation, Transmission & Distribution, SCI Journal, January 2014

Computer Applications in Engineering Education, SCI Journal, January 2014

IEEE, Transactions on Systems, Man, and Cybernetics, Part B, SCI Journal, January 2012

## Scientific Research / Working Group Memberships

Edward B. Fort Disiplinler arası araştırma merkezi, North Carolina Agricultural and Technical State University, United States Of America, <http://www.ncat.edu/research/fort-irc.html>, 2012 - 2012

## Metrics

Publication: 109

Citation (WoS): 1412

Citation (Scopus): 1655

H-Index (WoS): 20

H-Index (Scopus): 22

## Awards

Kahraman H. T., Fen Bilimleri Enstitüsü Yüksek Lisans Tez, Karadeniz Teknik Üniversitesi, January 2024

KAHRAMAN H. T., Development and Testing of Meta-Heuristic Regression, ICAT 2018 Antalya, April 2018

KAHRAMAN H. T., Climatic Zones Through Artificial Intelligence Methods: Case of Antalya, ICADET 2017, October 2017