

Res. Asst. PhD MURAT EMRE ERKOÇ

Personal Information

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International Researcher IDs

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Education Information

Doctorate, Erciyes University, Mühendislik Fakültesi, Elektrik- Elektronik Mühendisliği, Turkey 2018 - 2023

Postgraduate, Erciyes University, Mühendislik Fakültesi, Elektrik- Elektronik Mühendisliği, Turkey 2015 - 2018

Undergraduate, Middle East Technical University, Kuzey Kıbrıs Kampüsü, Mühendislik Fakültesi, Elektrik Elektronik Mühendisliği, Turkey 2009 - 2015

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, MULTIOBJECTIVE OPTIMIZATION ALGORITHMS IN COMPRESSED SENSING, Erciyes University, Mühendislik Fakültesi, Elektrik- Elektronik Mühendisliği, 2023

Postgraduate, ANALYZING AND DEVELOPMENT OF HEURISTIC ALGORITHMS IN COMPRESSED SENSING, Erciyes University, Mühendislik Fakültesi, Elektrik- Elektronik Mühendisliği, 2017

Research Areas

Technical Sciences, Electrical and Electronics Engineering

Academic Titles / Tasks

Research Assistant, Erciyes University, Mühendislik Fakültesi, Elektrik- Elektronik Mühendisliği, 2015 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. A comparative study of multi-objective optimization algorithms for sparse signal reconstruction
Erkoç M. E., Karaboga N.
ARTIFICIAL INTELLIGENCE REVIEW, vol.55, no.4, pp.3153-3181, 2022 (SCI-Expanded)

- II. A novel sparse reconstruction method based on multi-objective Artificial Bee Colony algorithm**
Erkoç M. E., Karaboğa N.
SIGNAL PROCESSING, vol.189, 2021 (SCI-Expanded)
- III. Sparse signal reconstruction by swarm intelligence algorithms**
ERKOÇ M. E., KARABOĞA N.
ENGINEERING SCIENCE AND TECHNOLOGY-AN INTERNATIONAL JOURNAL-JESTECH, vol.24, no.2, pp.319-330, 2021 (SCI-Expanded)
- IV. Evolutionary algorithms for sparse signal reconstruction**
ERKOÇ M. E., KARABOĞA N.
Signal, Image and Video Processing, vol.13, no.7, pp.1293-1301, 2019 (SCI-Expanded)

Articles Published in Other Journals

- I. Comparison of Reconstruction Algorithms for Sparse Signal Recovery from Noisy Measurement**
Erkoç M. E., Özdemir G., Karaboğa N.
Majlesi Journal of Telecommunication Devices, vol.7, no.1, pp.17-21, 2018 (Peer-Reviewed Journal)
- II. Analysis of the Effects of the Frequency Band Values on the Performance of the Cosine Modulated Filter Bank Design**
Özdemir G., Erkoç M. E., Karaboğa N.
Majlesi Journal of Telecommunication Devices, vol.7, no.7, pp.11-15, 2018 (Peer-Reviewed Journal)

Books & Book Chapters

- I. Multi-objective Sparse Signal Reconstruction in Compressed Sensing**
Erkoç M. E., Karaboğa N.
in: Nature-Inspired Metaheuristic Algorithms for Engineering Optimization Applications , Serdar Carbas,Abdurrahim Toktas,Deniz Ustun, Editor, Springer, London/Berlin , Singapore, pp.373-396, 2021

Refereed Congress / Symposium Publications in Proceedings

- I. Blok Tabanlı Sıkıştırılmış Algılama Metotlarının İncelenmesi ve Karşılaştırılması**
ERKOÇ M. E., KARABOĞA N.
EEMKON 2019, 14 - 16 November 2019
- II. USING FPGA'S FOR EDUCATIONAL PURPOSES IN LOGIC LABORATORY**
ÖZDEMİR G., ERKOÇ M. E., KARABOĞA N.
ICEMST-2018, International Conference on Education in Mathematics,Science and Technology, Muğla, Turkey, 28 April - 01 May 2018
- III. INTEGRATION OF PROGRAMMABLE HARDWARES TO ENGINEERING EDUCATION:FPGA'S**
ERKOÇ M. E., ÖZDEMİR G., ÖZDEMİR U., KARABOĞA N.
ICEMST-2018, International Conference on Education in Mathematics, Science and Technology, Muğla, Turkey, 28 April - 01 May 2018
- IV. Analysis of the Effect of the Stop Band and Transition Band Frequency Values on the Performance of the Filter Bank Design**
ÖZDEMİR G., ERKOÇ M. E., KARABOĞA N.
International Advanced Researches and Engineering Congress, 16 - 18 November 2017
- V. Comparison of Minimization and Greedy Algorithms for Recovering Sparse Frequency Domain Signals**
ERKOÇ M. E., KARABOĞA N.

- International Workshop, " Mathematical Methods in Engineering, MME-2017, 27 - 29 April 2017
- VI. **Ayrık Dalgacık Analizi Ve Dalgacık Paket Analizi Yöntemlerini Kullanarak EEG Sinyalinde Gürültü Giderimi**
ERKOÇ M. E., KARABOĞA N.
Otomatik Kontrol Ulusal Toplantısı (TOK 2016), Turkey, 29 September - 01 October 2016, pp.165-168
- VII. **EEG Sinyalindeki Gürültünün Giderilmesinde Ayrık Dalgacık Ve Ayrık Durağan Dalgacık Dönüşümlerinin Performanslarının İncelenmesi**
ERKOÇ M. E., KARABOĞA N., Küçüköz N.
Akıllı Sistemlerde Yenilikler ve Uygulamaları Sempozyumu (ASYU2016), Turkey, 29 September - 01 October 2016
- VIII. **Noise cancellation application of ECG signal using artificial bee colony algorithm**
KOÇKANAT S., KOZA T., KARABOĞA N., ERKOÇ M. E.
2016 24th Signal Processing and Communication Application Conference, SIU 2016, Turkey, 16 - 19 May 2016

Supported Projects

Karaboğa N., Erkoç M. E., Project Supported by Higher Education Institutions, Using Multi-Purpose Optimization Algorithms in Compressed Detection, 2021 - 2023

KARABOĞA N., ERKOÇ M. E., Project Supported by Higher Education Institutions, SIKIŞTIRILMIŞ ALGILAMADA SEZGİSEL ALGORİTMALARIN KULLANIMINA DAYALI YÖNTEMLERİN İNCELENMESİ VE GELİŞTİRİLMESİ, 2017 - 2018

Scientific Refereeing

SIGNAL, IMAGE AND VIDEO PROCESSING, Journal Indexed in SCI-E, November 2022
PLOS ONE, Journal Indexed in SCI-E, September 2022
IEEE ACCESS, Journal Indexed in SCI-E, June 2022

Metrics

Publication: 15
Citation (WoS): 20
Citation (Scopus): 25
H-Index (WoS): 3
H-Index (Scopus): 3