

# EROL SEKE

## ASSOC. PROF.

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International Researcher IDs

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### Education

Doctorate  
1990 - 1995

Lehigh University, Department Of Electrical Engineering, United States Of America

Postgraduate  
1985 - 1988

Anadolu University, Institute Of Science, Elektrik-Elektronik Mühendisliği (YI) (Tezli), Turkey

Undergraduate  
1981 - 1985

Anadolu University, Faculty Of Engineering-Architecture, Department Of Electrical And Electronic Engineering, Turkey

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, A Study of Distortion Measures for Vector Quantization of Images, Lehigh University, Department Of Electrical Engineering, 1995

Postgraduate, CNC-tezgah eğitiminin bilgisayar programlarıyla yapılması, Anadolu University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği (YI) (Tezli), 1988

### Academic Titles / Tasks

Associate Professor  
2020 - Continues

Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ,  
ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ BÖLÜMÜ

Assistant Professor  
1996 - 2020

Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ,  
ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ BÖLÜMÜ

Research Assistant  
1985 - 1989

Anadolu University, Faculty Of Engineering-Architecture, Department Of Electrical And Electronic Engineering

### Supported Projects

1. Özkan K., Çömlekçioğlu N., Seke E., Ünal F., Bozbuğa R., Önder S., Kartal Y., Kahya D., TUBITAK Project, Yapay Zeka İle Sera Koşullarındaki Hıyar Yetiştiriciliğinde Bazı Hastalık Ve Zararlıların Erken Dönemde Tanısı Ve İzlenmesi, 2023 - 2025
2. Özkan K., Seke E., Olgun M., Belen S., Karaduman Y., Uzun İ., Kartal Y., TUBITAK Project, Ülkesel Ekmeklik Buğday Alım Baremi İçin Taşınabilir V-NIR Cihazı Geliştirilmesi, 2020 - 2022
3. ÖZKAN K., KARTAL Y., SEKE E., CEYLAN M. N., ADAR N., GÜREL U., Project Supported by Higher Education Institutions, EsOguChain: Blok Zinciri Tabanlı Dijital Öğrenci Sertifika Uygulaması, 2020 - 2021
4. SEKE E., Project Supported by Higher Education Institutions, Yazılım Tanımlı Radyo Bileşenleri Geliştirilmesi, 2016 - 2018
5. SEKE E., DURAK M. H., Project Supported by Higher Education Institutions, Ortak Vektör Yaklaşımıyla Ses İşaretinde Gürültü Giderme, 2015 - 2016
6. SEKE E., ÖZKAN K., Project Supported by Higher Education Institutions, Düşük Çözünürlüğe Sahip Görüntülerden Yüksek Çözünürlüğe Sahip Görüntüler Elde Edilmesi, 2010 - 2012
7. SEKE E., ADAR N., ŞORA GÜNAL E., Project Supported by Higher Education Institutions, Sayısal Görüntü Üzerinde Derinlik ve Boyut Analizi, 2004 - 2007

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

1. **Classification of wheat varieties with image-based deep learning**  
Ceyhan M., Kartal Y., Özkan K., Seke E.  
MULTIMEDIA TOOLS AND APPLICATIONS, vol.83, no.4, pp.9597-9619, 2024 (SCI-Expanded)
2. **Consensus rule for wheat cultivar classification on VL, VNIR and SWIR imaging**  
IŞIK Ş., ÖZKAN K., Demirez D. Z., SEKE E.  
IET Image Processing, vol.16, no.11, pp.2834-2844, 2022 (SCI-Expanded)
3. **A novel addressing algorithm of radix-2 FFT using single-bank dual-port memory**  
Kaya Z., SEKE E.  
CIRCUIT WORLD, vol.48, no.1, pp.64-70, 2022 (SCI-Expanded)
4. **SRLibrary: Comparing different loss functions for super-resolution over various convolutional architectures**  
ANAGÜN Y., IŞIK Ş., SEKE E.  
JOURNAL OF VISUAL COMMUNICATION AND IMAGE REPRESENTATION, vol.61, pp.178-187, 2019 (SCI-Expanded)
5. **Face Depth Estimation With Conditional Generative Adversarial Networks**  
Arslan A. T., SEKE E.  
IEEE ACCESS, vol.7, pp.23222-23231, 2019 (SCI-Expanded)
6. **Multi-frame super-resolution algorithm using common vector approach**  
SEKE E., ANAGÜN Y., ADAR N.  
IET IMAGE PROCESSING, vol.12, no.12, pp.2292-2299, 2018 (SCI-Expanded)
7. **A subspace based progressive coding method for speech compression**  
Keser S., GEREK Ö. N., SEKE E., Gillmezoglu M. B.  
SPEECH COMMUNICATION, vol.94, pp.50-61, 2017 (SCI-Expanded)
8. **Image denoising using common vector approach**  
ÖZKAN K., SEKE E.  
IET IMAGE PROCESSING, vol.9, no.8, pp.709-715, 2015 (SCI-Expanded)
9. **Least squares sub-pixel registration refinement using area sampler model**  
SEKE E., Ozkan K.  
JOURNAL OF MATHEMATICAL IMAGING AND VISION, vol.26, pp.19-25, 2006 (SCI-Expanded)
10. **Iterative super-resolution reconstruction using modified subgradient method**  
Ozkan K., SEKE E., ADAR N., Canbek S.  
MULTIMEDIA CONTENT REPRESENTATION, CLASSIFICATION AND SECURITY, vol.4105, pp.714-721, 2006 (SCI-Expanded)

11. **FLUID EXPULSION SITES ON THE CASCADIA ACCRETIONARY PRISM - MAPPING DIAGNETIC DEPOSITS WITH PROCESSED GLORIA IMAGERY**  
CARSON B., SEKE E., PASKEVICH V., HOLMES M.  
JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH, vol.99, no.B6, pp.11959-11969, 1994 (SCI-Expanded)

## Articles Published in Other Journals

1. **Memory-Based Self-Ordering FFT for Efficient I/O Scheduling**  
Kaya Z., Seke E.  
Eskişehir Technical University Journal of Science and and Technology A- Applied Sciences and Engineering, vol.25, no.1, pp.156-167, 2024 (Peer-Reviewed Journal)
2. **Wheat kernels classification using visible-near infrared camera based on deep learning**  
ÖZKAN K., SEKE E., IŞIK Ş.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.27, no.5, pp.618-626, 2021 (ESCI)
3. **An Image-based Recommender System Based on Image Annotation**  
ÖZKAN K., KURT Z., SEKE E.  
European Journal of Engineering and Natural Sciences, vol.3, no.1, pp.12-16, 2019 (Peer-Reviewed Journal)
4. **SINGLE BANK DUAL-PORT MEMORY-BASED FFT FOR FIELD PROGRAMMABLE GATE ARRAYS**  
SEKE E., KAYA Z.  
Anadolu University Journal of Science and Technology-A Applied Sciences and Engineering, pp.1, 2018 (Peer-Reviewed Journal)
5. **A new speech signal denoising algorithm using common vector approach**  
SEKE E., ÖZKAN K.  
INTERNATIONAL JOURNAL OF SPEECH TECHNOLOGY, vol.21, no.3, pp.659-670, 2018 (ESCI)
6. **Optimized Parameters for Bell-Shaped Error Function in Image Denoising**  
ÖZKAN K., SEKE E.  
ANADOLU UNIVERSITY JOURNAL OF SCIENCE AND TECHNOLOGY A - Applied Sciences and Engineering, vol.18, no.5, pp.988-999, 2017 (Peer-Reviewed Journal)
7. **Speech Denoising using Common Vector Analysis in Frequency Domain**  
SEKE E., DURAK M. H., ÖZKAN K.  
International Journal of Applied Mathematics, Electronics and Computers, no.4, pp.224-229, 2016 (Peer-Reviewed Journal)
8. **Edge Preserving Super Resolution using an Adaptive Outlier Rejection Method**  
ÖZKAN K., SEKE E.  
Journal of Engineering Architecture Faculty, vol.23, no.2, pp.35-51, 2010 (Peer-Reviewed Journal)
9. **Modeling a Web Service Based Decentralized Parallel Programming Environment**  
ADAR N., CANBEK S., SEKE E., AKÇAY M.  
Book Series Lecture Notes in Computational Science and Engineering, vol.67, pp.465-472, 2009 (Peer-Reviewed Journal)
10. **GÖRÜNTÜ İSTATİSTİKLERİNDEN FAYDALANARAK LBG ALGORİTMASININ GÜNCELLENMESİ**  
ÖZKAN K., SEKE E.  
Journal of Engineering and Architecture Faculty of Eskişehir Osmangazi University, no.1, pp.35-51, 2007 (Peer-Reviewed Journal)
11. **Multiresolution Approach to Subpixel Registration by Linear Approximation of PSF**  
SEKE E., ÖZKAN K.  
PROCEEDINGS OF WORLD ACADEMY OF SCIENCE, ENGINEERING AND TECHNOLOGY, VOL1, vol.1, pp.96-99, 2007 (Peer-Reviewed Journal)
12. **Rregistration of subpixel translations using a piecewise linear approximation of PSF**  
SEKE E., ÖZKAN K.

## Books

1. **VHDL Örnekleriyle Sayısal Haberleşmeye Giriş**  
SEKE E.  
Seçkin Yayıncılık, Ankara, 2017
2. **Modeling a Web Service-Based Decentralized Parallel Programming Environment**  
ADAR N., CANBEK S., SEKE E., AKÇAY M.  
in: Parallel Computational Fluid Dynamics, , Editor, Springer Nature Switzerland AG., Berlin, pp.465-472, 2009
3. **Discrimination of Fluid Seeps on the Convergent Oregon Continental Margin with GLORIA imagery**  
Carson B., Paskevich V., SEKE E., Holmes M. L.  
in: Geology of the United States Seafloor The View from GLORIA, James V. Gardner, Michael E. Field, David C. Twichell, Editor, Cambridge University Press, Cambridge, pp.169-179, 2005

## Papers Published in Refereed Scientific Meetings

1. **Video Coding using Multiple Reference Frames and Weighted Averaging**  
Kilinç Ç., Seke E.  
2023 Innovations in Intelligent Systems and Applications Conference (ASYU), Sivas, Turkey, 11 - 13 October 2023, pp.1-4
2. **Effect of Number of Filters on Convolutional Neural Networks' Performance**  
Cingöz N. N., Seke E.  
2023 Innovations in Intelligent Systems and Applications Conference (ASYU), Sivas, Turkey, 11 - 13 October 2023, pp.1-5
3. **Yakın Kızılötesi Spektroskopi ile Sinir Ağları Tabanlı Buğday Sınıflandırılması**  
Seke E., Dönmez M.  
International Conference on Emerging Sources in Science, İstanbul, Turkey, 26 - 27 May 2022, pp.40-50
4. **CONSTRUCTION OF BLOCKS USING MULTIPLE REFERENCE BLOCKS IN VIDEO CODING**  
Kilinç Ç., Seke E.  
AHI EVRAN INTERNATIONAL CONFERENCE ON SCIENTIFIC RESEARCH, Kırşehir, Turkey, 30 November - 02 December 2021, vol.1, pp.301
5. **PEAK-TO-AVERAGE POWER RATIO REDUCTION IN OFDM SYSTEMS USING PHASE AND AMPLITUDE CHANGES**  
SHALIZADA F., SEKE E.  
INTERNATIONAL ASIAN CONGRESS ON CONTEMPORARY SCIENCES-IV, Baku, Azerbaijan, 26 - 28 May 2020, vol.1, pp.541-553
6. **PEAK-TO-AVERAGE POWER RATIO REDUCTION IN ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING SYSTEMS USING PHASE SHIFTS**  
SHALIZADA F., SEKE E.  
II International Ankara Conference of Scientific Research, Ankara, Turkey, 06 March 2020 - 08 March 2020, vol.1, pp.280-281
7. **Training Wasserstein GANs for Estimating Depth Maps**  
Arslan A. T., Seke E.  
3rd International Symposium on Multidisciplinary Studies and Innovative Technologies, ISMSIT 2019, Ankara, Turkey, 11 - 13 October 2019
8. **Optimized parameters for bell-shaped error function in recommender system**  
ÖZKAN K., SEKE E., KARTAL Y., ÜNAL T., KASAP M.  
EURO 2018 29th European Conference on Operational Research, 8 - 11 July 2018

9. **Hızlı Yakınsayan Göç Yönteminin Farklı Test Fonksiyonları için İncelenmesi**  
KUVAT G., ADAR N., CANBEK S., SEKE E.  
12. Elektrik Elektronik Bilgisayar Biyomedikal Mühendisliği Ulusal Kongresi ve Fuarı, Eskişehir, Turkey, 14 - 18 November 2007
10. **Comparative HDL Implementations of Two Chaotic Generators**  
KAYA Z., SEKE E.  
5th International Conference on Advanced Technology Sciences (ICAT2017), 9 - 12 May 2017
11. **Serial-in-Parallel-out FFT**  
SEKE E., KAYA Z.  
5th International Conference on Advanced Technology Sciences (ICAT2017), 9 - 12 May 2017
12. **Illuminant Direction Estimation Methods**  
ARSLAN A. T., SEKE E.  
5th International Conference on Advanced Technology Sciences (ICAT 17), İstanbul, Turkey, 9 - 12 May 2017
13. **Shape Features Based Conic Arcs for Unclassified Wheat Identification**  
ONARCAN A. O., ÖZKAN K., SEKE E., Ogun M.  
III International Conf. on Engineering and Natural Science, Budapest, Hungary, 3 - 07 May 2017, vol.1, pp.1253-1256
14. **An Image-based Recommender System Based on Image Annotation**  
ÖZKAN K., KURT Z., SEKE E.  
3rd International Conference on Engineering and Natural Sciences, Budapest, Hungary, 3 - 07 May 2017, pp.1248-1252
15. **Image Enhancement with Outlier Detection**  
Anagün Y., Adar N., Seke E.  
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017
16. **Subspace based Speech Enhancement using Common Vector Approach**  
DURAK M. H., SEKE E., ÖZKAN K.  
4th International Symposium on Innovative Technologies in Engineering and Science, Antalya, Turkey, 3 - 05 November 2016, pp.1735-1742
17. **SPEECH DENOISING USING COMMON VECTOR ANALYSIS IN FREQUENCYDOMAIN**  
SEKE E., DURAK M. H., ÖZKAN K.  
3rd International Conference on Advanced Technology & Sciences, 1 - 03 September 2016
18. **A Vhdl Implementation of Hénon Map Pseudo- Random Sequence Generator**  
KAYA Z., SEKE E.  
International Conference on Engineering and Natural Sciences, Sarajevo, Bosnia And Herzegovina, 24 - 28 May 2016, vol.3, pp.668-671
19. **A new Approach for Speech Denoising**  
ÖZKAN K., SEKE E., İŞİK Ş.  
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.2109-2112
20. **Video Super-Resolution Based on Block Motion Estimation and Gradient Magnitude**  
ANAGÜN Y., SEKE E., ADAR N.  
International Symposium on Innovations in Intelligent Systems and Applications (INISTA 2015), Madrid, Spain, 2 - 04 September 2015, pp.77-82
21. **Numerically Controlled Oscillator using De Moivre Identity**  
KAYA Z., SEKE E.  
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.451-454
22. **Denoising Speech Signal using Common Vector Approach**  
Durak M. H., SEKE E., ÖZKAN K.  
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.1961-1964

23. **Implementation of 3D Face Construction from a Face Image**  
Arslan A. T., SEKE E.  
9th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 26 - 28 November 2015, pp.256-258
24. **Implementation of Numerically Controlled Oscillator that uses De Moivre Identity and Trigonometric Relations**  
KAYA Z., SEKE E.  
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.1643-1646
25. **A Numerically Controlled Oscillator Based on De Moivre's Identity and Linear Approximation A ROMless NCO**  
KAYA Z., SEKE E.  
International Conference Information Communication Automation Technologies (ICAT), Sarajevo, Bosnia And Herzegovina, 29 - 31 October 2015
26. **MULTIPLIER-FREE RAISED-COSINE FILTER FOR BINARY STREAMS USING DDS**  
KAYA Z., SEKE E.  
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.128-131
27. **Direct Generation of Upsampled FIR Filter Response A Simple Extension to Filters with Distributed Arithmetic**  
KAYA Z., SEKE E.  
10th International Conference on Digital Technologies, Zilina, Slovakia, 9 - 11 July 2014, pp.110-113
28. **Automated PET Classification in Waste Management Systems using Kernel PCA**  
KURT Z., ÖZKAN K., SEKE E.  
4th International Exergy, Life Cycle Assessment, and Sustainability Workshop Symposium, Nisyros Island, Greece, 7 - 09 July 2013
29. **Transparency Detection for Automated PET Classification in Waste Management Systems**  
ÖZKAN K., SEKE E.  
International Conference on Environmental Science and Technology, Nevşehir, Turkey, 18 - 21 June 2013
30. **An Image Superresolution Problem Using The New Data Fidelity Term**  
ÖZKAN K., SEKE E., KURT Z.  
Fourth International Conference on Mathematical and Computational Applications, Manisa, Turkey, 11 - 13 June 2013, vol.1, pp.59-66
31. **Kenarlılık En Büyüklemesi ile İmgedeki Bulanıklığın Giderilmesi**  
ÖZKAN K., SEKE E.  
ELEKTRİK - ELEKTRONİK ve BİLGİSAYAR MÜHENDİSLİĞİ SEMPOZYUMU ELECO 2010, Bursa, Turkey, 2 - 05 December 2010
32. **Super resolution using variable size block matching motion estimation with rotation**  
Anagün Y., Seke E.  
2012 International Symposium on Innovations in Intelligent Systems and Applications, Trabzon, Turkey, 2 - 04 July 2012
33. **Super resolution using block-matching motion estimation with rotation**  
Anagün Y., Seke E.  
2012 20th Signal Processing and Communications Applications Conference (SIU), Muğla, Turkey, 18 - 20 April 2012
34. **Temporal video interpolation with nonlinear motion estimation**  
Cimtay Y., SEKE E.  
2012 20th Signal Processing and Communications Applications Conference (SIU), Mugla, Turkey, Turkey, 18 - 20 April 2012
35. **Frame Rate Up-Conversion With Nonlinear Temporal Interpolation**  
Cimtay Y., SEKE E.

5th International Congress on Image and Signal Processing (CISP), Chongqing, China, 16 - 18 October 2012, pp.206-210

36. **Combination of l1 and l2 norms for image deconvolution problems**  
ÖZKAN K., SEKE E.  
Electrical and Electronics Engineering (ELECO), 2011 7th International Conference on, Bursa, Turkey, 1 - 04 December 2011, vol.2, pp.148-151
37. **Combination of l1 and l2 norms for image deconvolution problems**  
ÖZKAN K., SEKE E.  
7th International Conference on Electrical and Electronics Engineering, ELECO 2011, Bursa, Turkey, 1 - 04 December 2011
38. **Uyarlamalı İki Yönlü Hareket Kestirimli Zamansal Video Ara Değerlemesi**  
Yücel Ç., SEKE E.  
Elektrik-Elektronik Bilgisayar Sempozyumu, Elazığ, Turkey, 5 - 07 October 2011, vol.2, pp.78-85
39. **Yüksek Çözünürlük Algoritmasında L1 ve L2 Norm Seçimi**  
KURT Z., ÖZKAN K., SEKE E.  
Elektrik-Elektronik Bilgisayar Sempozyumu, Elazığ, Turkey, 5 - 07 October 2011, vol.2, pp.73-77
40. **Determining illumination sources in frontal face images using salient samples from a face depth map**  
SEKE E.  
2011 International Symposium on Innovations in Intelligent Systems and Applications, Istanbul, Turkey, 15 - 18 June 2011
41. **Image deblurring based on maximization of edginess Kenarlılık en büyükleme ile imgedeki bulanıklığın giderilmesi**  
ÖZKAN K., SEKE E.  
2010 7th National Conference on Electrical, Electronics and Computer Engineering, ELECO 2010, Bursa, Turkey, 2 - 05 December 2010, pp.634-637
42. **ÖZYİNELİ YÜKSEK ÇÖZÜNÜRLÜK ALGORİTMASI İÇİNDE UYARLAMALI VE AYKIRI DEĞER AYIKLAMALI ARADEĞERLEME**  
ÖZKAN K., SEKE E.  
Uzaktan Algılama ve CBS sempozyumu (3.UZAL-CBS) UZALCBS 2010, Kocaeli, Turkey, 11 - 13 October 2010, pp.273-280
43. **Hücre Alanları Yöntemi ile Subpiksel mge Çakırtmada Parlaklık Etkisinin Giderilmesi**  
ÖZKAN K., SEKE E.  
HİTEK 2004, Havacılıkta İleri Teknolojiler ve Uygulamaları Sempozyumu, İstanbul, Turkey, 1 - 03 December 2004
44. **DÜŞÜK ÇÖZÜNÜRLÜKLÜ GÖRÜNTÜLERDEN AYKIRI DEĞER AYIKLAMASI KULLANARAK GÜRBÜZ YÜKSEK ÇÖZÜNÜRLÜKLÜ GÖRÜNTÜ ELDE ETME YÖNTEMİ**  
ÖZKAN K., SEKE E.  
elektrik, elektronik ve bilgisayar mühendisleri sempozyumu , eleco 2006, Bursa, Turkey, 6 - 10 December 2006
45. **Measuring Roughness on Wood Surfaces for Detection of Defects Using Multi Frame Imaging**  
Çavdarlı M., SEKE E.  
International Symposium on INnovations inIntelligent SysTems and Applications, Kayseri, Turkey, 21 - 24 June 2010, vol.1, pp.415-419
46. **Modeling a web service-based decentralized parallel programming environment**  
ADAR N., CANBEK S., SEKE E., AKÇAY M.  
Parallel Computational Fluid Dynamics, Parallel CFD 2007, Antalya, Turkey, 21 - 24 May 2007, vol.67 LNCSE, pp.465-472
47. **Göç Yöntemleri, Göç Oranı ve Paralel Genetik Algoritmalar**  
KUVAT G., ADAR N., CANBEK S., SEKE E.  
ASYU 2008 - Akıllı Sistemlerde Yenilikler ve Uygulamaları Sempozyumu, Isparta, Turkey, 18 - 20 June 2008
48. **Use of Multiple Features in License Plate Detection**  
SEKE E., ADAR N.  
IEEE 16th Signal Processing and Communications Applications Conference, Aydın, Turkey, 20 - 22 April 2008,

pp.433-434

49. **Subpixel image registration using cell areas** Hücre alanları yöntemiyle alt pikseli imge çakıştırma  
Oezkan K., SEKE E.  
2007 IEEE 15th Signal Processing and Communications Applications, SIU, Eskişehir, Turkey, 11 - 13 June 2007
50. **Kümelı Hesaplama Yönteminin Değişik Parametrelerle İncelenmesi**  
AKÇAY M., ADAR N., SEKE E.  
12. elektrik elektronik bilgisayar ve biyomedikal müh ulusal kongresi, Eskişehir, Turkey, 14 - 18 November 2007
51. **Taşıt Plakası Karakterlerinin Tanınması İçin Verimli Özellik Ağacı**  
Ateş H., SEKE E.  
12. elektrik elektronik bilgisayar ve biyomedikal müh ulusal kongresi, Eskişehir, Turkey, 14 - 18 November 2007
52. **New Migration Schemes for Parallel Genetic Algorithms on Cluster Systems**  
KUVAT G., ADAR N., SEKE E., CANBEK S.  
INISTA-2007 Int.Symposium on Innovations in Intelligent Systems and Applications, İstanbul, Turkey, 20 - 23 June 2007
53. **Robust License Plate Extraction Using a Combination of Spatial and Frequency Domain Features**  
SEKE E., ADAR N.  
INISTA-2007 Int.Symposium on Innovations in Intelligent Systems and Applications, İstanbul, Turkey, 20 - 23 June 2007
54. **Heterojen Kümelı Bilgisayarların Modellenmesi**  
AKÇAY M., ADAR N., SEKE E.  
UMES 2007–Ulusal Teknik Eğitim, Mühendislik ve Eğitim Bilimleri GençAraştırmacılar Sempozyumu, Kocaeli, Turkey, 20 - 22 June 2007, vol.1
55. **Paralel genetik algorıtmalarda hızlı yakınsayan göç yöntemi**  
KUVAT G., ADAR N., CANBEK S., SEKE E.  
UMES 2007–Ulusal Teknik Eğitim, Mühendislik ve Eğitim Bilimleri GençAraştırmacılar Sempozyumu, Kocaeli, Turkey, 20 - 22 June 2007, vol.1, pp.71-74
56. **Iterative Super Resolution Reconstruction from Multiple Images Using Cluster Computers**  
ADAR N., SEKE E., KANDEMİR C. M., ÖZKAN K.  
2007 IEEE 15th Signal Processing and Communications Applications, Eskişehir, Turkey, Turkey, 11 - 13 June 2007
57. **Detection of partially occluded upper body pose using hidden Markov model**  
ADAR N., Kale N. A., Canbek S., SEKE E.  
IEEE 15th Signal Processing and Communications Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007, pp.1062-1063
58. **Multiresolution Approach to Subpixel Registration by Linear Approximation of PSF**  
SEKE E., ÖZKAN K.  
Conference of the World-Academy-of-Science-Engineering-and-Technology, London, Canada, 12 - 14 January 2005, vol.1, pp.96-99
59. **Iterative Super Resolution Reconstruction from Multiple Images Using Cluster Computers**  
ADAR N., SEKE E., KANDEMİR C. M., ÖZKAN K.  
IEEE 15th Signal Processing and Communications Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007, pp.1187-1188
60. **Real-time motion region detection and contouring system**  
Aksoy E., ADAR N., Canbek S., SEKE E., GÜREL U.  
IEEE 15th Signal Processing and Communications Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007, pp.1070-1071
61. **LBG Algoritmasının Görüntü Dizileri İçin Güncellenmesi**  
ÖZKAN K., SEKE E.  
ELECO-2006 Elektrik, Elektronik, Bilgisayar Müh. Sempozyumu, Bursa, Turkey, 6 - 10 December 2006
62. **Düşük Çözünürlüklü Görüntülerden Aykırı Değer Ayıklaması Kullanarak Yüksek Çözünürlüklü Görüntü Elde Etme**



- ÖZKAN K., SEKE E.  
ELECO-2006 Elektrik, Elektronik, Bilgisayar Müh. Sempozyumu, Bursa, Turkey, 6 - 10 December 2006
63. **Blur estimation in iterative super-resolution restoration algorithms**  
ÖZKAN K., SEKE E., Canbek S.  
IEEE 14th Signal Processing and Communications Applications, Antalya, Turkey, 16 - 19 April 2006, pp.469-470
64. **Iterative super-resolution reconstruction using modified subgradient method**  
ÖZKAN K., SEKE E., ADAR N., Canbek S.  
International Workshop on Multimedia Content Representation, Classification and Security, MRCS 2006, İstanbul, Turkey, 11 - 13 September 2006, pp.714-721
65. **Iterative Superresolution Reconstruction From Multiple Images With Area Sampling Sensor Model**  
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66. **Uzay Zaman Haberleşmesinde Quasi Newton ve Genetik Algoritmanın Kullanılması İle Farklı Başarımların Elde Edilmesi**  
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68. **Hücre Alanları Yöntemiyle Subpixel İmge Çakıştırma Parlaklık Etkisinin Giderilmesi**  
Kahraman S., SEKE E.  
HITEK-2004 Havacılıkta İleri Teknolojiler Sempozyumu, İstanbul, Turkey, 9 - 10 December 2004
69. **least squares subpixel image registration using CCD cell areas**  
SEKE E., ÖZKAN K.  
International Conference on Informatics, ICI 2004, İzmir, Turkey, 1 - 04 September 2004, pp.1-5
70. **görüntü sıkıştırma eksik cosine dönüşümü ile blok etkisini giderme**  
SEKE E., ÖZKAN K.  
8. sinyal işleme ve uygulamaları kurultayı, siu 2000, Antalya, Turkey, 12 - 14 June 2000, pp.263-266
71. **8085 Mikroişlemci Eğitim Setine Ait Bilgisayar Kullanım ve Sistem Programları Yazılımı**  
FADIL S., SEKE E., ERGÜN U., Kızılkaya .  
Bursa 4. Bilgisayar-Haberleşme Sempozyumu, Bursa, Turkey, 11 - 15 December 1995, pp.199-202

## Courses

### Doctorate

FPGA İLE SAYISAL HABERLEŞME BİLEŞENLERİ, Doctorate, 2019 - 2020, 2018 - 2019

### Undergraduate

INTRODUCTION TO VHDL-FPGA, Undergraduate, 2020 - 2021, 2017 - 2018, 2016 - 2017

COMMUNICATIONS, Undergraduate, 2019 - 2020, 2017 - 2018, 2016 - 2017

## Supervised Theses

SEKE E., Dik frekans bölmeli çoğullama sistemlerinde tepe-ortalama güç oranının azaltılması, Postgraduate, F.SHALIZADA(Student), 2020

SEKE E., Hızlı Fourier Dönüşümünün Alanda Programlanabilir Kapı Dizileri Üzerinde Uygulanması, Postgraduate, M.EMRE(Student), 2020

SEKE E., HIZLI FOURIER DÖNÜŞÜMÜ ve DİĞER DİK FREKANS BÖLÜTLEMELİ ÇOĞULLAMA BİLEŞENLERİNİN ALANDA PROGRAMLANABİLİR KAPI DİZİLERİNDE UYGULANMASI, Doctorate, Z.KAYA(Student), 2019

SEKE E., Yinelemeli geribildirim ile 3B yüz imgesi oluşturma, Doctorate, A.TAHA(Student), 2019

SEKE E., Video Sıkıştırma Çoklu Hareket Vektörlerinin Kullanılması, Doctorate, Ç.KILINÇ(Student), 2018  
SEKE E., Farklı dalga boylu görüntülerle buğday sınıflandırılması, Postgraduate, D.ZEYNEP(Student), 2018  
SEKE E., Düşük çözünürlüklü video sahnelerinden yüksek çözünürlüklü video sahnelerinin elde edilmesi, Doctorate, Y.ANAGÜN(Student), 2018  
SEKE E., Ortak vektör yaklaşımıyla ses verisinde gürültü giderme, Postgraduate, M.HAKAN(Student), 2015  
SEKE E., Alanda Programlanabilir Kapı Dizileri'nde işaret üretimi ve süzgeçlerin gerçekleştirilmesi, Postgraduate, Z.KAYA(Student), 2015  
SEKE E., Doğrusal olmayan hareket kestirimi ile video çerçeve ara değerlemesi, Postgraduate, Y.ÇİMTAY(Student), 2012  
SEKE E., Düşük çözünürlüklü görüntülerden yüksek çözünürlüklü görüntü elde etme, Doctorate, K.ÖZKAN(Student), 2007  
SEKE E., Hız kontrolü amacı ile demiryolu dönüş şiddetinin lokomotif üzerindeki bir kamera ile belirlenmesi, Postgraduate, H.BAŞAR(Student), 2006  
SEKE E., Ötelenmiş çoklu görüntülerin restorasyonu, Postgraduate, Ö.AKBULUT(Student), 2006  
SEKE E., Düşük çözünürlüklü görüntülerden yüksek çözünürlüklü resim elde etme teknikleri, Postgraduate, İ.SÜRAL(Student), 2003  
SEKE E., LBG algoritmasında görüntü istatistiklerinden faydalanma, Postgraduate, K.ÖZKAN(Student), 2000

## Metrics

Publication: 97  
Citation (WoS): 105  
Citation (Scopus): 160  
H-Index (WoS): 4  
H-Index (Scopus): 5

## Research Areas

Information Theory, Modulation Methods, Image and Video Processing, Signal Processing for Communication, Pattern Recognition and Analysis

## Non Academic Experience

Savronik Aş, Teknik danışman  
University, Eskişehir Osmangazi University, Student Affairs, Öğrenci İşleri Yönetim Sistemi  
Company, Savronik AŞ, Embedded Systems, FPGA Consultant  
Ester Aş, Teknik Danışman  
Company, Ester Aş, Hospital Management Software, Software Consultant  
Savronik Aş, Teknik danışman  
WEFA Inc., Software Analyst, Programmer  
Company, WEFA Inc., Software Department, Software Design  
Lehigh University, Fluid Mechanics Lab., Programmer  
University, Lehigh University, Mechanical Engineering, Programmer  
University, Lehigh University, Geology Department, Programmer  
Lehigh University, Geology Department, Image Processing Programmer  
Disaş Disjonktör Parafudr, Yüksek Voltaj Lab. Teknisyeni