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Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği (YI) (Tezli), Turkey 1986 - 1993

Postgraduate, Bogazici University, Institute Of Science, Elektrik-Elektronik Mühendisliği (YI) (Tezli), Turkey 1983 - 1985

Undergraduate, Bogazici University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering, Turkey 1980 - 1983

Academic Titles / Tasks

Professor, Gazi University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2007 - 2011

Associate Professor, Gazi University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2002 - 2006

Assistant Professor, Baskent University, Faculty Of Engineering, Department Of Biomedical Engineering, 1999 - 2000

Academic and Administrative Experience

Gazi University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2013 - Continues

Advising Theses

KARAGÖZ İ., Automatic Target Recognition In Sar Images By Using Sparse Representation And Gabor Filters, Postgraduate, A.KARAGÖZ(Student), 2018

KARAGÖZ İ., Development Of Real-Time And Adaptive Star Detection Algorithm Using Defined Space Models For Star Tracker Devices, Postgraduate, S.AL(Student), 2018

KARAGÖZ İ., The Three-Dimensional Analysis Of Epiretinal Electrical Stimulation Using Finite Element Method: Investigation Of Temperature Change Over The Retina Depending On Stimulation Parameters, Doctorate, M.EMİN(Student), 2017

KARAGÖZ İ., Development Of High Speed And High Accuracy Star Identification Algorithm For Star Trackers, Postgraduate, A.DOĞAN(Student), 2017

KARAGÖZ İ., Developing A Speckle Noise Reduction Algorithm For Diagnostic Ultrasound Imaging Systems, Doctorate, M.ALPARSLAN(Student), 2015

KARAGÖZ İ., Doppler ultrason görüntüleme sistemlerinde yeni bir uyarlamalı spektral güç yoğunluk tahmin yöntemi kullanarak çözünürlüğün iyileştirilmesi, Postgraduate, M.MIKAEILI(Student), 2015

KARAGÖZ İ., Enhancement of spatial resolution in ultrasonic doppler Imaging systems by using new adaptive power spectral density Estimation method, Postgraduate, M.Mikaeili(Student), 2015

KARAGÖZ İ., Design and implementation of an incubator for newborn units, Postgraduate, Ş.ÇALIŞKAN(Student), 2013
KARAGÖZ İ., Development of image processing and neural stimulation model for epiretinal implants in artificial vision systems, Doctorate, M.ÖZDEN(Student), 2012
KARAGÖZ İ., MAMOGRAMLARDA MİKROKALSİFİKASYON TESPİTİ, Doctorate, P.KUŞ(Student), 2012
KARAGÖZ İ., Development of an adaptive safety parameter model for diagnostic ultrasound and improvement of image quality, Doctorate, M.KEMAL(Student), 2011
KARAGÖZ İ., Gelişmiş bir ABR ölçüm sistemi tasarımı ve gerçekleştirilmesi, Postgraduate, M.GÜNDOĞAN(Student), 2010
KARAGÖZ İ., GELİŞMİŞ BİR ABR ÖLÇÜM SİSTEMİ TASARIMI VE GERÇEKLENMESİ, Postgraduate, M.GÜNDOĞAN(Student), 2010
KARAGÖZ İ., RCS OF PERFECTLY CONDUCTING TWO-DIMENSIONAL CONTOUR, Postgraduate, T.MOHAMMED(Student), 2008
KARAGÖZ İ., PRECISION CALIBRATOR DESIGN AND IMPLEMENTATION FOR X-RAY DIAGNOSTIC DEVICES, Postgraduate, H.GEMİCİ(Student), 2008
KARAGÖZ İ., THE INVESTIGATION OF TEMPERATURE RISE FORMED BY DIAGNOSTIC ULTRASOUND ON TISSUE DUE TO NONLINEAR PROPAGATION AND MAKING A SIMULATION PROGRAMME, Postgraduate, M.ALPARSLAN(Student), 2008
KARAGÖZ İ., İki boyutlu mükemmel iletkenlerin radar kesit alanı hesabı, Postgraduate, T.MOHAMMED(Student), 2008
KARAGÖZ İ., IMPROVED SPEECH PROCESSING TECHNIQUE FOR SINGLE CHANNEL SYSTEMS, Postgraduate, H.ŞAHİN(Student), 2007
KARAGÖZ İ., IPV6 TUNNEL AND VIRTUAL TARGET IP TECHNIQUES FOR TRANSITION PROCESS FROM IPV4 TO IPV6, Postgraduate, K.ERDOĞAN(Student), 2007
KARAGÖZ İ., Sürekli dalga ultrasonografinin dokuda oluşturduğu sıcaklık artışının hesaplanması ve tanınasal ultrasonografinin yan etkilerinin analizi, Postgraduate, M.KEMAL(Student), 2005
KARAGÖZ İ., Çelik üretiminde ikincil metalürjide yapay sinir ağı uygulaması, Postgraduate, A.TOLGA(Student), 2005

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Negative Effects of Noise on NICU Graduates' Cochlear Functions**
Beken S., Onal E. E., Gündüz B., Cakir U., Karagöz İ., Kemaloğlu Y. K.
FETAL AND PEDIATRIC PATHOLOGY, vol.40, no.4, pp.295-304, 2021 (SCI-Expanded)
- II. **Comparison of Monophasic and Biphasic Electrical Stimulation by Using Temporal Analysis for Different Inter-electrode Spacings in the Hexagonal Arrays**
ÇELİK M. E., KARAGÖZ İ.
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.43, no.6, pp.2889-2898, 2018 (SCI-Expanded)
- III. **Modified ultrasound despeckling assessment index for the Field II simulated cyst image**
GÜNGÖR M. A., KARAGÖZ İ.
IET IMAGE PROCESSING, vol.11, no.9, pp.667-671, 2017 (SCI-Expanded)
- IV. **A novel finite element method based retinal stimulation strategy to decrease stimulation threshold and electrode crosstalk**
ÇELİK M. E., KARAGÖZ İ.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.32, no.2, pp.563-573, 2017 (SCI-Expanded)
- V. **The homogeneity map method for speckle reduction in diagnostic ultrasound images**
GÜNGÖR M. A., KARAGÖZ İ.
MEASUREMENT, vol.68, pp.100-110, 2015 (SCI-Expanded)
- VI. **A New Efficient Retina Stimulation Strategy for High Resolution Retina Implant Systems**
KARAGÖZ İ., Sobaci G., Ozden M.
INVESTIGATIVE OPHTHALMOLOGY & VISUAL SCIENCE, vol.55, no.13, 2014 (SCI-Expanded)
- VII. **An in Vitro Study for Analysing the Responses to Monophasic Pulses from Retinal Ganglion Cells**
Eren M., ÇELİK M. E., ÖZDEN M., Sobaci G., KARAGÖZ İ.
OPHTHALMOLOGICA, vol.232, pp.40-41, 2014 (SCI-Expanded)

- VIII. **Spatiotemporal realization of an artificial retina model and performance evaluation through ISI- and spike count-based image reconstruction methods**
 KARAGÖZ İ., Ozden M.
 TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.22, no.1, pp.223-241, 2014 (SCI-Expanded)
- IX. **Detection of microcalcification clusters in digitized X-ray mammograms using unsharp masking and image statistics**
 Kus P., KARAGÖZ İ.
 TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.21, pp.2048-2061, 2013 (SCI-Expanded)
- X. **Improving image quality of diagnostic ultrasound by using the safe use time model with the dynamic safety factor and the effect of the exposure time on the image quality**
 KARAGÖZ İ., Kartal M. K.
 ULTRASONICS, vol.52, no.1, pp.93-102, 2012 (SCI-Expanded)
- XI. **Fully automated gradient based breast boundary detection for digitized X-ray mammograms**
 Kus P., KARAGÖZ İ.
 COMPUTERS IN BIOLOGY AND MEDICINE, vol.42, no.1, pp.75-82, 2012 (SCI-Expanded)
- XII. **A NEW GAUSSIAN DISTRIBUTION BASED ADAPTIVE SIMULATION ALGORITHM DEVELOPED FOR ARTIFICIAL SIGHT SYSTEMS**
 Ozden M., KARAGÖZ İ.
 JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.26, no.3, pp.691-700, 2011 (SCI-Expanded)
- XIII. **A new safety parameter for diagnostic ultrasound thermal bioeffects: Safe use time**
 KARAGÖZ İ., Kartal M. K.
 JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA, vol.125, no.6, pp.3601-3610, 2009 (SCI-Expanded)
- XIV. **Evaluation of free radical formation associated with diagnostic ultrasound**
 Kartal M. K., Kaya M., KAVUTÇU M., KARAGÖZ İ., ALKAN Z.
 VETERINARY RADIOLOGY & ULTRASOUND, vol.49, no.4, pp.383-387, 2008 (SCI-Expanded)

Articles Published in Other Journals

- I. **CONTINUOUS MONITORING OF THE SOUND IN NEONATAL INTENSIVE CARE UNIT**
 Çakır U., BEKEN S., ÖNAL E. E., KARAGÖZ İ., KEMALOĞLU Y. K.
 PONTE International Scientific Researchs Journal, vol.73, no.9, 2017 (Peer-Reviewed Journal)
- II. **The effects of the median filter with different window sizes for ultrasound image**
 GÜNGÖR M. A., KARAGÖZ İ.
 Computer and Communications (ICCC), pp.549-552, 2016 (Peer-Reviewed Journal)
- III. **Comparing Non homomorphic and Homomorphic Wavelet Filtering Techniques for Speckled Images**
 GÜNGÖR M. A., KARAGÖZ İ.
 International Journal of Computer Theory and Engineering, vol.8, no.5, pp.393-397, 2016 (Peer-Reviewed Journal)
- IV. **Simulation of Electrical Stimulation of Layered Retina with Bipolar Electrode Configuration and Temperature Change on the Retina**
 ÇELİK M. E., KARAGÖZ İ.
 International Journal of Computational and Experimental Science and Engineering, vol.1, no.1, pp.5-7, 2015 (Peer-Reviewed Journal)
- V. **An Object Based Tool for Wavelet Thresholding to Reduce Speckle Noise**
 GÜNGÖR M. A., KARAGÖZ İ.
 Journal of Image and Graphics, vol.3, no.1, pp.65-69, 2015 (Scopus)
- VI. **Spatio Temporal Electrode Mapping and Local Interleaved Stimulation Method STEMLIS for Artificial Sight Systems**

ÖZDEN M., KARAGÖZ İ.

Journal of Bioengineering & Biomedical Science, vol.5, no.2, 2015 (Peer-Reviewed Journal)

VII. **The Effect of the Electrical Stimulation on Temperature Rise in the Retinal Tissue for Visual Prostheses**

ÇELİK M. E., KARAGÖZ İ.

International Journal of Computer and Electrical Engineering, vol.6, no.4, pp.369-372, 2014 (Peer-Reviewed Journal)

VIII. **Investigation The Role Of Carbon Nanotubes For High Resolution Visual Prostheses**

ÇELİK M. E., KARAGÖZ İ.

International Journal on Technical and Physical Problems of Engineering, vol.6, no.18, pp.192-197, 2014 (Scopus)

IX. **The analysis of different approaches related to the measurement uncertainty in biomedical calibration**

KARAGÖZ İ., Cecelioğlu S.

Gazi University Journal of Science, vol.20, no.3, pp.61-67, 2007 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

I. **Effectiveness of Asymmetry Analysis Technique Based on Statistical Features in Breast Cancer Detection with Modern Thermographic Imaging Systems**

KARAGÖZ İ.

International Conference on Medical and Biological Engineering in Bosnia and Herzegovina (CMBEBIH), Banja Luka, Bosnia And Herzegovina, 16 - 18 May 2019, vol.73, pp.159-163

II. **An Improved Star Detection Algorithm Using a Combination of Statistical and Morphological Image Processing Techniques**

Samed A. L., KARAGÖZ İ., Dogan A.

IEEE Applied Imagery Pattern Recognition Workshop (AIPR), Washington, Kiribati, 9 - 11 October 2018

III. **New Algorithm for Star Trackers: Frame Scoring**

DOĞAN A., KARAGÖZ İ.

AIAA SPACE and Astronautics Forum and Exposition, 12 - 14 September 2017

IV. **Finite Element Method Based Modeling Of A New Electrode Design And Stimulation Strategy For Retinal Stimulation**

ÇELİK M. E., KARAGÖZ İ.

The Young Researcher Vision Camp An International Career Building Symposium, Leibertingen, Germany, 30 June - 02 July 2017, pp.24

V. **Automatic Target Recognition in SAR Images via Sparse Representation and Gabor Filters**

Karagoz A., KARAGÖZ İ.

25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017

VI. **The Effects of the Median Filter with Different Window Sizes for Ultrasound Image**

GÜNGÖR M. A., KARAGÖZ İ.

2nd IEEE International Conference on Computer and Communications (ICCC), Chengdu, China, 14 - 17 October 2016, pp.549-552

VII. **The Analysis of Tissue Temperature Rise Caused by Linear Array Transducers with Program Spheresum**

GÜNGÖR M. A., KARAGÖZ İ.

International Conference on Optoelectronics and Image Processing (ICOIP), Warszawa, Poland, 10 - 12 June 2016, pp.54-58

VIII. **Determination of Excitation Thresholds for Retina Ganglion Cells Using Biphasic and Monophasic Stimulation Pulses to be Designed for High Resolution Epiretinal Prosthesis**

ÇELİK M. E., KARAGÖZ İ., ÖZDEN M., SOBACI G.

2nd International Symposium on Artificial Vision, Aachen, Germany, 27 - 28 November 2015, pp.4

- IX. In Silico Development of 3 dimensional Retina Model and Monophasic Stimulation Environment**
ÇELİK M. E., KARAGÖZ İ.
3rd International Symposium on Innovative Technologies in Engineering and Science, Valencia, Spain, 3 - 05 June 2015, pp.1756-1762
- X. A new adaptive power spectral density estimation method based on projection of the cross spectral metric technique into the amplitude and phase estimation APES technique**
Mikaeili M., KARAGÖZ İ.
International Conference of Image Processing, Production and Computer Science 2015, 3 - 04 June 2015, pp.97-103
- XI. Experimentally determination of optimal electrical stimulation pulse parameters for designing high resolution epiretinal implant system**
KARAGÖZ İ., ÇELİK M. E., ÖZDEN M., SOBACI G.
The Annual Meeting of the Association for Research in Vision and Ophthalmology (ARVO), Colorado, United States Of America, 3 - 07 May 2015
- XII. A New Offline Spike Detection Approach For Neural Signals Recorded From Rabbit Retina Ganglion Cell Layer**
ÇELİK M. E., KARAGÖZ İ.
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.2203-2205
- XIII. Türkiyede Yeni Bir Epiretinal İmplant Sistemi Geliştirmeye Yönelik Deneysel Çalışmalar**
Eren M., ÇELİK M. E., ÖZDEN M., SOBACI G., KARAGÖZ İ.
Türk Oftalmoloji Derneği 48. Ulusal Kongresi, Antalya, Turkey, 5 - 09 November 2014
- XIV. Development of Computational Retinal Stimulation Model Based on Bipolar Electrode Configuration**
ÇELİK M. E., KARAGÖZ İ.
2nd International Symposium on Innovative Technologies in Engineering and Science, 18 - 20 June 2014, pp.1939-1948
- XV. THE EFFECT OF STIMULATION ELECTRODE ARRAY SIZE ON THE TEMPERATURE OF THE RETINAL TISSUE IN VISUAL PROSTHESES**
ÇELİK M. E., KARAGÖZ İ.
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.244-247
- XVI. Visual Prostheses With High SpatioTemporal Resolution**
ÇELİK M. E., ÖZDEN M., KARAGÖZ İ.
9th International Conference on Technical and Physical Problems of Electrical Engineering, 9 - 11 September 2013, pp.515-519
- XVII. The Role Of Carbon Nanotubes At ElectrodeTissue Interface For High Resolution Visual Prostheses**
ÇELİK M. E., ÖZDEN M., KARAGÖZ İ.
9th International Conference on Technical and Physical Problems of Electrical Engineering, 9 - 11 September 2013, pp.510-514
- XVIII. SIMULATION BASED COMPUTATION MODEL FOR EPIRETINAL PROSTHESIS**
ÇELİK M. E., KARAGÖZ İ.
10th International Conference on Electronics, Computer and Computation (ICECCO), Ankara, Turkey, 7 - 09 November 2013, pp.52-55
- XIX. Noise effects on hospitalized neonates. PP-25.**
ÖNAL E. E., ÇAKIR U., BEKEN S., HIRFANOĞLU İ. M., KEMALOĞLU Y. K., KARAGÖZ İ., ÖZDEN M., ÜNAL S., KULALI F., KOÇ E., et al.
VIth Recent advances in Neonatal Medicine, 2 - 04 October 2011
- XX. Accurate Segmentation of the Breast Region in Mammograms Based On Pixel Intensity**
Kus P., KARAGÖZ İ.
IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009, pp.198-201

- XXI. Precision Calibrator Design and Implementation for X-Ray Diagnostic Devices**
Gemici H., KARAGÖZ İ., Ozden M.
14th National Biomedical Engineering Meeting, İzmir, Turkey, 20 - 22 May 2009, pp.56-59
- XXII. Image Processing Method for Artificial Sight Systems Based on Contrast Information**
Ozden M., Karadoruk N., KARAGÖZ İ.
14th National Biomedical Engineering Meeting, İzmir, Turkey, 20 - 22 May 2009, pp.281-284
- XXIII. Time-scale modification of speech signals for language-learning impaired children**
EROĞUL O., KARAGÖZ İ.
Biomedical Engineering Days, Proceedings of the 1998 2nd International Conference, Turkey, 01 May 1998

Supported Projects

- KARAGÖZ İ., Project Supported by Higher Education Institutions, Biyomedikal Kalibratör Alımı, 2015 - 2017
- KARAGÖZ İ., Project Supported by Higher Education Institutions, Yapay Görme Protezleri İçin Simülasyon Sistemi Tasarımı, 2010 - 2012
- KARAGÖZ İ., Project Supported by Higher Education Institutions, Gelişmiş Bir Abr Ölçüm Sistemi, 2008 - 2011
- KARAGÖZ İ., Project Supported by Higher Education Institutions, Biomedikal Sinyallerin lab.ortamında yapay olarak oluşturulması ve incelenmesi, 2004 - 2006
- KARAGÖZ İ., Project Supported by Higher Education Institutions, Hastanın Medikal Ölçüm Bilgilerinin İnternet Üzerinden Yollanan Taşınabilir Ölçüm Cihazı Tasarımı ve Uygulaması, 2003 - 2006

Metrics

- Publication: 46
- Citation (WoS): 58
- Citation (Scopus): 63
- H-Index (WoS): 4
- H-Index (Scopus): 5