

Prof. MURAT HÜSNÜ SAZLI

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAH-6663-2020

ScopusID: 15078749000

Yoksis Researcher ID: 122626

Education Information

Doctorate, Syracuse University, Elektrik Mühendisliği, United States Of America 1998 - 2003

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği (YI) (Tezli), Turkey 1994 - 1997

Undergraduate, Ankara University, Mühendislik Fakültesi, Elektronik Mühendisliği Pr., Turkey 1990 - 1994

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Neural Networks Applications to Turbo Decoding, Syracuse University, Elektrik Mühendisliği, 2003

Postgraduate, Simüle kompleks aritmetik EKG sinyallerinin kapalı logografik rekonlar ve yeni temel lokalizasyon yöntemleri ile değerlendirilmeleri ve bazı uygulamaları, Ankara University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği (YI) (Tezli), 1997

Research Areas

Electrical and Electronics Engineering

Academic Titles / Tasks

Professor, Ankara University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2020 - Continues

Associate Professor, Ankara University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2014 - 2020

Assistant Professor, Ankara University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2006 - 2014

Research Assistant, Ankara University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1994 - 2006

Academic and Administrative Experience

Head of Department, Ankara University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2006 - Continues

Ankara University, 2009 - 2012

Deputy Head of Department, Ankara University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2006 - 2011

Courses

ELE427 COMMUNICATION THEORY II, Undergraduate, 2013 - 2014

ELM472 MÜHENDİSLİKTE PROJELENDİRME II, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007

805541 YAPAY SİNİR AĞLARI, Doctorate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007

ELM471 MÜHENDİSLİKTE PROJELENDİRME I, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007

ELE362 COMMUNICATION LABORATORY I, Undergraduate, 2013 - 2014

ELM409 HABERLEŞME TEORİSİ I, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009

ELE322 COMMUNICATION THEORY I, Undergraduate, 2013 - 2014, 2012 - 2013

ELM410 HABERLEŞME TEORİSİ II, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009

805540 KABLOSUZ İLETİŞİM, Doctorate, 2011 - 2012, 2009 - 2010, 2008 - 2009, 2007 - 2008

ELM460 HABERLEŞME LABORATUVARI II, Undergraduate, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009

ELM459 HABERLEŞME LABORATUVARI I, Undergraduate, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009

ELM207 ANALOG ELEKTRONİK, Undergraduate, 2010 - 2011, 2009 - 2010, 2008 - 2009

YDİ340 İŞ HAYATINDA YABANCI DİL, Undergraduate, 2010 - 2011, 2008 - 2009, 2007 - 2008

ELM204 DEVRE ANALİZİ II, Undergraduate, 2007 - 2008, 2006 - 2007

ELM203 DEVRE ANALİZİ I, Undergraduate, 2007 - 2008, 2006 - 2007

YDİ339 MESLEKİ YABANCI DİL II, Undergraduate, 2007 - 2008

Advising Theses

SAZLI M. H., Diabetic retinopathy diagnosis using convolutional artificial neural networks and image processing techniques, Postgraduate, A.TÜRKMEN(Student), 2021

SAZLI M. H., Dangerous material detection and classification with convolutionary artificial neural networks and image processing techniques, Postgraduate, M.EMİN(Student), 2021

SAZLI M. H., Derin öğrenme kullanarak işaret dili rakam tanıma, Postgraduate, H.GÜLER(Student), 2021

SAZLI M. H., Izgara Tabanlı Parmak İzi Algoritmalarıyla Kapalı Alan Konumlandırma Optimizasyonu, Postgraduate, A.ALPER(Student), 2017

SAZLI M. H., AKARSU E. S., Deneysel olarak oluşturulan epileptik diken aktivitesinin sinyal işleme metotları ve yapay sinir ağları kullanılarak incelenmesi ve bulguların otonomik ve davranışsal yanıtlarla füzyonu, Doctorate, D.KARAÇOR(Student), 2015

SAZLI M. H., Rf/mikrodalga tasarımlarında akıllı modelleme sistemlerinin uygulanması, Doctorate, E.DEMİRCİOĞLU(Student), 2014

SAZLI M. H., Kablosuz iletişimde işbirlikçi çeşitleme yöntemlerinin araştırılması, Doctorate, S.KULAÇ(Student), 2012

SAZLI M. H., Haberleşme uydu almaçlarında oluşan spektral büyümenin ve SCPC kanalların C/I performansları üzerindeki etkisinin simülasyonu, Postgraduate, V.YANIKGÖNÜL(Student), 2012

SAZLI M. H., BCJR algoritması kullanılan turbo kod çözücülerin FPGA gerçekleştirimi, Postgraduate, O.ATAR(Student), 2011

SAZLI M. H., İnternet protokolü sürüm 6 (IPv6) mimarisi üzerinde servis sınıflarının önceliklendirilmesi, Postgraduate, M.EŞREF(Student), 2010

SAZLI M. H., IPTV servisinde video kalitesi kriterleri ve görüntü bozukluklarının giderilmesi, Postgraduate, Ü.FUNDA(Student), 2010

SAZLI M. H., Bilişsel radyo şebekelerinde yapay sinir ağları ile spektrum yönetimi, Postgraduate, EAÇAOĞLU(Student), 2010

SAZLI M. H., RF MEMS aygıtlar için dikey/yatay beslemeli paket yapısının geliştirilmesi, Postgraduate, E.ÖZÇAKIR(Student), 2010

SAZLI M. H., Savunma sistemlerinde yazılım proje yönetimi, Postgraduate, G.GÜMRÜKÇÜ(Student), 2010

SAZLI M. H., Saldırı tespit sistemlerinde yapay sinir ağlarının kullanılması, Postgraduate, H.TANRIKULU(Student), 2009

SAZLI M. H., Yapay sinir ağları ile konuşma tanıma, Postgraduate, G.DEDE(Student), 2008

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A Novel Identity-Based Privacy-Preserving Anonymous Authentication Scheme for Vehicle- to- Vehicle Communication**
Genc Y., Korkuc C., Aytas N., AFACAN E., SAZLI M. H., Yazgan E.
ELEKTRONIKA IR ELEKTROTEHNIKA, vol.29, no.2, pp.69-77, 2023 (SCI-Expanded)
- II. **Adaptive network-based inference system models on multiband patch antenna design**
Demircioglu E., SAZLI M. H., Sengul O., İMECİ Ş. T., ILGIN H. A.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.23, no.1, pp.118-125, 2015 (SCI-Expanded)
- III. **Slot Parameter Optimization for Multiband Antenna Performance Improvement Using Intelligent Systems**
Demircioglu E., Yagli A. F., Gulgonul S., ANKIŞHAN H., Tartan E. O., SAZLI M. H., Imeci T.
INTERNATIONAL JOURNAL OF ANTENNAS AND PROPAGATION, vol.2015, 2015 (SCI-Expanded)
- IV. **Effective cooperative DTV detection using the Goertzel algorithm**
KULAÇ S., SAZLI M. H.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.23, no.5, pp.1384-1392, 2015 (SCI-Expanded)
- V. **Discrete Lissajous Figures and Applications**
Karacor D., Nazlibilek S., Sazlı M. H., Akarsu E. S.
IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, vol.63, no.12, pp.2963-2972, 2014 (SCI-Expanded)
- VI. **Automatic segmentation, counting, size determination and classification of white blood cells**
NAZLIBİLEK S., Karacor D., Ercan T., SAZLI M. H., Kalender O., EGE Y.
MEASUREMENT, vol.55, pp.58-65, 2014 (SCI-Expanded)
- VII. **Soft computing techniques on multiresonant antenna synthesis and analysis**
Demircioglu E., SAZLI M. H., İMECİ Ş. T., Sengul O.
MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, vol.55, no.11, pp.2643-2648, 2013 (SCI-Expanded)
- VIII. **FPGA implementation of turbo decoders using the BCJR algorithm Implementacja turbo-dekodera na platformie FPGA z wykorzystaniem algorytmu BCJR**
Atar O., SAZLI M. H., İLK H. G.
Przegląd Elektrotechniczny, vol.89, no.2 B, pp.257-260, 2013 (SCI-Expanded)
- IX. **ENERGY EFFICIENT COOPERATIVE DTV SPECTRUM SENSING**
KULAÇ S., SAZLI M. H.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.28, no.1, pp.77-84, 2013 (SCI-Expanded)
- X. **Identification of materials with magnetic characteristics by neural networks**
Nazlibilek S., EGE Y., Kalender O., Sensoy M. G., Karacor D., Sazh M. H.

MEASUREMENT, vol.45, no.4, pp.734-744, 2012 (SCI-Expanded)

- XI. **FPGA IMPLEMENTATION OF TURBO DECODERS USING BCJR ALGORITHM**
Atar O., SAZLI M. H.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.26, no.4, pp.823-832, 2011 (SCI-Expanded)
- XII. **Behavioral Modeling of a C-Band Ring Hybrid Coupler Using Artificial Neural Networks**
Demircioglu E., SAZLI M. H.
RADIOENGINEERING, vol.19, no.4, pp.645-652, 2010 (SCI-Expanded)
- XIII. **Speech recognition with artificial neural networks**
Dede G., SAZLI M. H.
DIGITAL SIGNAL PROCESSING, vol.20, no.3, pp.763-768, 2010 (SCI-Expanded)
- XIV. **Neural network implementation of the BCJR algorithm**
SAZLI M. H., Isik C.
DIGITAL SIGNAL PROCESSING, vol.17, no.1, pp.353-359, 2007 (SCI-Expanded)

Articles Published in Other Journals

- I. **The effect of improvement of datasets on accuracy achievement in deep learning: an example of disease detection in hops plant**
Tanrikulu H., SAZLI M. H., Parça H.
Journal of Global Innovations in Agricultural Sciences, vol.10, no.1, pp.1-7, 2022 (Scopus)
- II. **The Prediction of Propagation Loss of FM Radio Station Using Artificial Neural Network**
ÖZDEMİR A. R., ALKAN M., KABAK M., GÜLŞEN M., SAZLI M. H.
Journal of Electromagnetic Analysis and Applications, vol.6, no.11, pp.358-365, 2014 (Peer-Reviewed Journal)
- III. **FPGA implementation of turbo decoders using the BCJR algorithm**
ATAR O., SAZLI M. H., İLK H. G.
Przegląd Elektrotechniczny, vol.89, no.2b, pp.257-260, 2013 (Scopus)
- IV. **Use of Source and Channel Coding Techniques In Outdoor Laser Optical Wireless**
ARI F., AKBULUT A., SAZLI M. H., ÖZEK F.
The Mediterranean Journal of Electronics and Communications, vol.2, no.3, pp.127-130, 2006 (Peer-Reviewed Journal)
- V. **A brief review of feed-forward neural networks**
Sazlı M. H.
Communications Faculty of Sciences University of Ankara Series A2-A3: Physical Sciences and Engineering, vol.50, no.1, pp.11-17, 2006 (Peer-Reviewed Journal)
- VI. **An overview of turbo decoding on fading channels**
SAZLI M. H.
Communications Faculty Of Science University of Ankara, vol.50, no.1, pp.1-10, 2006 (Peer-Reviewed Journal)
- VII. **A review of turbo coding and decoding**
SAZLI M. H.
Communications Faculty Of Science University of Ankara, vol.49, no.1, pp.9-25, 2005 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Kablosuz Sensör Ağlarında Simülasyon Uygulamalarına Genel Bir Bakış**
TANRIKULU H., SAZLI M. H.
ISMSIT 2018, 2nd International Symposium on Multidisciplinary Studies and Innovative Technologies, KIZILCAHAMAM / ANKARA, 19 - 21 October 2018, pp.62-65
- II. **A Brief Review of Power Quality Issues in Smart Grid and a Simple User Friendly Software**

SAZLI M. H., KOŞALAY İ., Erdenesaikhan G.

6th International Istanbul Smart Grids and Cities Congress and Fair (ICSG), İstanbul, Turkey, 25 - 26 April 2018, pp.54-58

- III. **External Relaying Based Security Solutions for Wireless Implantable Medical Devices : A Review**
KULAÇ S., SAZLI M. H., İLK H. G.
11th IFIP Wireless and Mobile Networking Conference (WMNC), Prague, Czech Republic, 3 - 05 October 2018
- IV. **Accurate Indoor Localization with Optimized Fingerprinting Algorithm**
Basak A. A., SAZLI M. H.
5th International Istanbul Smart Grid and Cities Congress and Fair (ICSG), İstanbul, Turkey, 19 - 21 April 2017, pp.148-152
- V. **Artificial neural networks based multiband microstrip antenna modeling**
DEMİRCİOĞLU E., SAZLI M. H., İMECİ Ş. T., ILGIN H. A., KUZU L., ALTUNKILIÇ F.
ACES 2013, 29th Annual Review of Progress in Applied Computational Electromagnetics, Monterrey, Mexico, 24 - 28 May 2013, pp.552-557
- VI. **Inverse Modeling of Pseudo-interdigital Bandpass Filters Using Artificial Neural Networks**
Demircioglu E., SAZLI M. H., Sengul O., İMECİ Ş. T., Gokten M.
Progress In Electromagnetics Research Symposium, Stockholm, Sweden, 12 - 15 August 2013, pp.202-205
- VII. **A practical simulation tool for predicting spectral regrowth in communication satellite receivers**
YANIKGÖNÜL V., SAZLI M. H., KUZU L., GÖKTEN M., YAĞLI A. F.
SPACOMM 2012, The Fourth International Conference on Advances in Satellite and Space Communications, Chamonix, France, 29 April - 04 May 2012, pp.6-11
- VIII. **DTV spectrum sensing with pilot tone filtering**
Eksim A., Kulac S., SAZLI M. H.
2011 30th URSI General Assembly and Scientific Symposium, URSIGASS 2011, İstanbul, Turkey, 13 - 20 August 2011
- IX. **Pilot ton kullanarak DTV spektrum algilama DTV spectrum sensing with using pilot tone Ses-üstütsüz terminaller kullanılarak işbirlikli iletişimin gerçekleştirilmesi**
Kulaç S., Eksim A., SAZLI M. H.
2011 IEEE 19th Signal Processing and Communications Applications Conference, SIU 2011, Antalya, Turkey, 20 - 22 April 2011, pp.434-437
- X. **FPGA implementation of turbo decoders**
ATAR O., SAZLI M. H., İLK H. G.
KTTO 2011, 11th International Conference on Knowledge in Telecommunication Technologies and Optics, Szczyrk, Poland, 22 - 24 June 2011, pp.103-108
- XI. **S-band TCR patch antenna design for nano satellites Nano uydularda TKM S-bant yama anten tasarımı**
İmecı Ş. T., Apaydin Z., Demircioğlu E., SAZLI M. H.
18th IEEE Signal Processing and Communications Applications Conference, SIU 2010, Diyarbakır, Turkey, 22 - 24 April 2010, pp.657-660
- XII. **Cooperative Spectrum Sensing in IEEE 802.22 Standard**
Kulac S., Eksim A., SAZLI M. H.
IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009, pp.972-973
- XIII. **Effective Cooperative Spectrum Sensing in IEEE 802.22 Standard with Time Diversity**
Eksim A., Kulac S., SAZLI M. H.
International Conference on Advances in Computational Tools for Engineering Applications, Beirut, Lebanon, 15 - 17 July 2009, pp.529-530
- XIV. **Cooperative Spectrum Sensing for Mobile Users**
Eksim A., Kulac S., Sazlt M. H.
IEEE 16th Signal Processing and Communications Applications Conference, Aydın, Turkey, 20 - 22 April 2008, pp.849-852

- XV. **Saldırı tespit sistemlerinde yapay sinir ağlarının kullanılması**
TANRIKULU H., SAZLI M. H.
XII. Türkiye’de Internet Konferansı, Inet-tr’07, Ankara, Turkey, 8 - 10 November 2007, pp.217-225
- XVI. **Neural network based face detection from pre-scanned and row-column decomposed average face image**
TELATAR Z., SAZLI M. H., Muhammad I.
9th International Conference on Advanced Concepts for Intelligent Vision Systems, Delft, Netherlands, 28 - 31 August 2007, vol.4678, pp.297-309
- XVII. **Neural network implementation of the BCJR algorithm based on reformulation using matrix algebra**
SAZLI M. H., Isik C.
5th IEEE International Symposium on Signal Processing and Information Technology, Athens, Greece, 18 - 21 December 2005, pp.832-837
- XVIII. **Logographic rectonization of ECG signals**
TÜZÜNALP Ö., SAZLI M. H.
ISI 51st WSC, Bulletin of the International Statistical Institute, Contributed Papers, İstanbul, Turkey, 18 - 26 August 1997, vol.1, pp.251-252

Supported Projects

SAMET R., SAZLI M. H., Industrial Thesis Project, Gerçek Zamanlı Paralel Görüntü İşleme Tekniği ile Kovan Muayene Sisteminin Gerçekleştirilmesi, 2013 - 2016

Sazlı M. H., Project Supported by Higher Education Institutions, Deneysel olarak oluşturulan epileptik diken aktivitesinin sinyal işleme metodları ve yapay sinir ağları kullanılarak incelenmesi, 2012 - 2014

Metrics

Publication: 39

Citation (WoS): 230

Citation (Scopus): 324

H-Index (WoS): 6

H-Index (Scopus): 8

Awards

Sazlı M. H., Outstanding Teaching Assistant Award, Syracuse University, United States Of America, April 2002

Sazlı M. H., First place degree among the graduates of Engineering Departments of Faculty of Science, Ankara Üniversitesi Fen Fakültesi, June 1994

Sazlı M. H., First place degree among the graduates of Electronics Engineering Department, Ankara Üniversitesi, Fen Fakültesi, Elektronik Mühendisliği Bölümü, June 1994

Sazlı M. H., Third place degree among the graduates of Faculty of Science, Ankara Üniversitesi Fen Fakültesi, June 1994