

Assoc. Prof. MUZAFFER KANAAN

Personal Information

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Education Information

Doctorate, Worcester Polytechnic Institute, Mühendislik Fakültesi, Elektrik Ve Bilgisayar Mühendisliği, United States Of America 2000 - 2008

Post Graduate, New Jersey Institute Of Technology, Mühendislik Fakültesi, Elektrik Ve Bilgisayar Mühendisliği, United States Of America 1994 - 1996

Under Graduate, Dogu Akdeniz Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, Cyprus (Kktc) 1990 - 1994

Foreign Languages

English, C1 Advanced

Certificates, Courses and Trainings

IT, Certificate of Professional Achievement in Telecommunications Systems Technology, State-of-the-Art Program, Northeastern University, 2001

Dissertations

Doctorate, Node Density and Quality of Estimation for Infrastructure-based Indoor Geolocation Using Time of Arrival, Worcester Polytechnic Institute, Department Of Electrical And Computer Engineering, Wireless Communications, 2008

Post Graduate, A Simulation Environment for Code Division Multiple Access Wireless Communication Systems, New Jersey Institute Of Technology, Department Of Electrical And Computer Engineering, Wireless Communication, 1996

Research Areas

Technical Sciences, Information Systems, Communication and Control Engineering, Communication Engineering, Wireless Communication

Academic Titles / Tasks

Associate Professor, Erciyes University, Mühendislik Fakültesi, Mekatronik Mühendisliği, 2019 - Continues

Assistant Professor, Erciyes Üniversitesi, Mühendislik Fakültesi, Mekatronik Müh., 2018 - Continues

Assistant Professor, Erciyes Üniversitesi, Mühendislik Fakültesi, Mekatronik Müh., 2009 - 2018

Professional Experience

Erasmus Coordinator, Erciyes Üniversitesi, Dış İlişkiler Ofisi, Erasmus Kurum Koordinatörlüğü, 2016 - Continues
Deputy Head of Department, Erciyes Üniversitesi, Mekatronik Mühendisliği Bölümü, 2012 - Continues
Head of Department, Erciyes Üniversitesi, Mühendislik Fakültesi, Mekatronik Mühendisliği Bölümü, 2010 - Continues

Courses

Kablosuz Vücut ve Şahıs Alan Ağları, Post Graduate, 2016 - 2017
Sayısal İşaret İşleme, Under Graduate, 2016 - 2017
Bilgisayar Ağları, Under Graduate, 2016 - 2017
İşaretler ve Sistemler II, Under Graduate, 2016 - 2017
Mobil Robotik Sistemlerde Lokalizasyon ve Navigasyon, Post Graduate, 2016 - 2017
Kablosuz Sensör Ağları, Under Graduate, 2016 - 2017
Mekatronik Tasarım Uygulamaları I, Under Graduate, 2016 - 2017

Advising Theses

Kanaan M., Ergonomik ems (elektro kas uyarım) sistemi ile diyabetik polinöropati ağrı etkilerinin azaltılması, Post Graduate, Ş.GÜZEL(Student), 2018
Kanaan M., Tahl torbalama sistemlerinde (SILOBAG) kablosuz algılayıcı ağ (KAA) temelli tahl durum izleme, Post Graduate, C.KOÇER(Student), 2018
KANAAN M., Ultra Geniş Bant (UGB) Kablosuz Sistemlerin Vücut İçi Ortamlarda Kullanımı ve Mesafe Ölçüm Hatalarının Modellenmesi, Post Graduate, M.Suveren(Student), 2015
KANAAN M., Mobil Robotların Bina İçi Koşullarda Ulaşma Zamanı Kullanılarak Kablosuz Konumlandırılması, Post Graduate, Z.Abidin(Student), 2012

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **A new propagation modeling technique for ultra-wideband implant body area networks based on a neural network architecture**
KANAAN M., SUVEREN M.
NEURAL COMPUTING & APPLICATIONS, vol.28, pp.3603-3615, 2017 (Journal Indexed in SCI)
- **In-Body Ranging with Ultra-Wideband Signals: Techniques and Modeling of the Ranging Error**
KANAAN M., SUVEREN M.
WIRELESS COMMUNICATIONS & MOBILE COMPUTING, 2017 (Journal Indexed in SCI)
- **A novel frequency-dependent path loss model for ultra wideband implant body area networks**
KANAAN M., SUVEREN M.
MEASUREMENT, vol.68, pp.117-127, 2015 (Journal Indexed in SCI)
- **"A New Algorithm for TOA-based Indoor Geolocation",**
KANAAN M.
IEE Electronics Letters, vol.1, no.3, pp.12-13, 2004 (Journal Indexed in SCI)

Articles Published in Other Journals

- **IN-BODY RANGING FOR ULTRA-WIDE BAND WIRELESS CAPSULE ENDOSCOPY USING NEURAL NETWORKS BASED ON PARTICLE SWARM OPTIMIZATION**
KANAAN M., AKAY R., SUVEREN M.

- Selçuk Üniversitesi Mühendislik Bilim ve Teknoloji Dergisi, vol.6, pp.207-217, 2018 (National Refreed University Journal)
- **Mobil robotların bina içi koşullarda ulaşma zamanı kullanılarak kablosuz lokalizasyonu**
KANAAN M., KUŞ Z. A.
ÖMER HALİSDEMİR ÜNİVERSİTESİ MÜHENDİSLİK BİLİMLERİ DERGİSİ, vol.7, no.2018, pp.99-119, 2018 (National Refreed University Journal)
- **“Technical Aspects of Localization in Indoor Wireless Networks”**,
KANAAN M.
Bechtel Telecommunications Technical Journal., vol.1, no.1, pp.121-126, 2007 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- **5D Magnetic Localization for Wireless Capsule Endoscopy Using the Levenberg-Marquardt Method and Artificial Bee Colony Algorithm**
Suveren M., Kanaan M.
2019 IEEE 30th International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC Workshops), İstanbul, Turkey, 08 September 2019
- **On the Use of Human Body Models in Wireless Capsule Endoscopy Localization based on Ultra Wide Band Signaling**
SUVEREN M., KANAAN M.
5th International Conference on Engineering and Natural Sciences (ICENS), Prague, Czech Republic, 12 - 16 June 2019, pp.555-560
- **“Ultra Geniş Bant Kablosuz Endoskopi Kapsüllerinin Vücut İçi Lokalizasyonu için Yapay Sinir Ağları ile Mesafe Ölçümü”**,
KANAAN M., SUVEREN M.
IEEE Sinyal İşleme ve İletişim Uygulamaları-2016 (SIU-2016) Kurultayı, Zonguldak, Turkey, 16 - 19 May 2016, pp.1-4
- **“ZigBee Teknolojisinin Kömür Madeni Güvenliğinde Kullanımı Üzerine”**
KANAAN M., Şimşek E.
IEEE Sinyal İşleme ve İletişim Uygulamaları-2016 (SIU-2016) Kurultayı, Zonguldak, Turkey, 16 - 19 May 2016, pp.1-4
- **Ranging for in-body localization of ultra wide band wireless endoscopy capsules using neural networks Ultra Geniş Bant Kablosuz Endoskopi Kapsüllerinin Vücut İçi Lokalizasyonu için Yapay Sinir Ağları ile Mesafe Ölçümü**
KANAAN M., SUVEREN M.
24th Signal Processing and Communication Application Conference, SIU 2016, Zonguldak, Turkey, 16 - 19 May 2016, pp.717-720
- **In-Body Ranging for Ultra-Wide Band Wireless Capsule Endoscopy Using A Neural Network Architecture**
KANAAN M., SUVEREN M.
10th International Symposium on Medical Information and Communication Technology (ISMICT), Massachusetts, United States Of America, 20 - 23 March 2016
- **INVESTIGATION OF SHADOWING EFFECTS IN ULTRA WIDE BAND IMPLANT BODY AREA NETWORKS**
SUVEREN M., KANAAN M., KOÇER C.
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.874-877
- **“Ultra Geniş Bant İmplant Kablosuz Vücut Alan Ağlarında Gölgeleme Etkilerinin İncelenmesi”**
KANAAN M., SUVEREN M., KOÇER C.
IEEE Sinyal İşleme ve İletişim Uygulamaları Sempozyumu, 2014 (SIU-2014), Trabzon, Turkey, 21 - 23 April 2014,

pp.1-4

● **On the relationship between antenna parameters and near-field effects for UWB implant body area networks**

KANAAN M., Kocer C., SUVEREN M.

8th International Symposium on Medical Information and Communication Technology, ISMICT 2014, Florence, Italy, 2 - 04 April 2014

● **On The Bandwidth Dependency of Near-Field Effects in UWB Implant Body Area Networks**

KANAAN M., SUVEREN M., SARAÇOĞLU Ö. G.

UWBAN-2013, Boston, United States Of America, 30 September - 02 October 2013, pp.553-557

● **"Ranging Based on Maximum Likelihood Techniques for Ultra Wide Band Medical Implants",**

KANAAN M.

IEEE International Symposium on Personal, Indoor and Mobile Radio Communications 2011 (PIMRC'11), Toronto, Canada, 11 - 13 September 2011, pp.123-128

Supported Projects

KANAAN M., GÜZEL Ş., Project Supported by Higher Education Institutions, Ergonomik EMS Elektro Kas Uyarım Sistemi ile Diyabetik Polinöropati Ağrı Etkilerinin Azaltılması, 2017 - 2019

KANAAN M., KOÇER C., Project Supported by Higher Education Institutions, Tahıl Torbalama Sistemlerinde Kablosuz Algılayıcı Ağlar Kullanılarak Tahıl Kontrol Sistemi Tasarımı, 2017 - 2019

YILDIRIM Ş., ŞENEL S., KANAAN M., ERKAYA S., SAVAŞ S., YAMAÇLI S., Project Supported by Higher Education Institutions, Hastane Ortamında Hastalara Yardımcı Olacak Bir Mobil Robotun (HAYAMOR) Tasarlanması ve Gerçekleştirilmesi, 2013 - 2016

KANAAN M., SUVEREN M., Project Supported by Higher Education Institutions, Ultra geniş bant (UGB) kablosuz sistemlerin vücut içi ortamlarda kullanımı ve mesafe ölçüm hatalarının modellenmesi, 2014 - 2015

KANAAN M., SUVEREN M., Project Supported by Higher Education Institutions, Tıbbi İmplant Haberleşme Sistemleri İçin Ultra Geniş Bant Sinyal Propagasyonunun Modellenmesi, 2012 - 2014

Activities in Scientific Journals

International Journal of Wireless Information Networks, Special Issue Editor, 2016 - 2017

Memberships / Tasks in Scientific Organizations

Member, 1992 - Continues

Scientific Refereeing

Journal on Progress in Electromagnetics Research, SCI Journal, July 2017

IEEE Global IoT Summit, 2017 (GIoTS'17), Other journals, June 2017

IEEE Access, SCI Journal, May 2017

The Journal of Engineering, Other journals, March 2017

IETE Journal of Research, SCI Journal, March 2017

Invited Congress and Symposium Activities

IEEE Sinyal İşleme ve İletişim Uygulamaları Konferansı - 2016 (SIU-2016), Attendee, –Seçiniz–, Turkey, 2016

IEEE International Symposium on Medical Information and Communication Technology, 2016 (ISMICT-2016), Session Moderator, Massachusetts, United States Of America, 2016
IEEE International Symposium on Medical Information and Communication Technology, 2016 (ISMICT-2016), Attendee, Massachusetts, United States Of America, 2016
IEEE Sinyal İşleme ve İletişim Uygulamaları Konferansı, 2014 (SIU-2014), Attendee, Turkey, 2014

Citations

Total Citations (WOS):12

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