

Asst. Prof. ERDOĞAN AYDIN

Personal Information

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Education Information

Doctorate, Yıldız Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Elektronik Ve Haberleşme Mühendisliği, Turkey 2011 - 2016

Post Graduate, İstanbul Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Turkey 2007 - 2010

Under Graduate, İstanbul Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, Turkey 2003 - 2007

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Uzaysal Modülasyon Tabanlı Yüksek Başarımli Röleli Sistemler, Yıldız Teknik Üniversitesi, Elektrik-Elektronik Mühendisliği, Elektronik Ve Haberleşme Mühendisliği, 2016

Post Graduate, Kanal Kestirimi İçin Bayesçi Yaklaşımlar, İstanbul Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2010

Research Areas

Electrical and Electronics Engineering, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, İstanbul Medeniyet Üniversitesi, Faculty of Engineering and Natural Sciences , Elektrik-Elektronik Mühendisliği, 2018 - Continues

Assistant Professor, İstanbul Medeniyet Üniversitesi, Faculty of Engineering and Natural Sciences , Department of Electrical and Electronic Engineering, 2017 - 2018

Assistant Professor, Maltepe Üniversitesi, Faculty Of Engineering And Natural Sciences, Department Of Electrical And Electronics Engineering, 2016 - 2017

Research Assistant, Maltepe Üniversitesi, Mühendislik Ve Doğa Bilimleri Fakültesi, Elektrik-Elektronik Mühendisliği, 2007 - 2016

Professional Experience

Head of Department, İstanbul Medeniyet University, Faculty Of Engineering And Natural Sciences , Space Engineering Department, 2017 - Continues

Deputy Head of Department, İstanbul Medeniyet Üniversitesi, Faculty of Engineering and Natural Sciences , Elektrik Elektronik Mühendisliği Bölümü, 2017 - Continues

Courses

Sayısal Haberleşme Kuramı, Post Graduate, 2017 - 2018
Elektrik Devre Laboratuvarı, Under Graduate, 2017 - 2018
Microprocessors, Under Graduate, 2017 - 2018
Bilgisayar Destekli Tasarım, Under Graduate, 2017 - 2018
İstatistiksel İşaret İşleme, Post Graduate, 2017 - 2018
Signals and Systems, Under Graduate, 2016 - 2017
Bilgisayar Destekli Tasarım, Under Graduate, 2016 - 2017
Kontrol Teorisi, Under Graduate, 2016 - 2017
Olasılık ve Rastgele Süreçler, Under Graduate, 2016 - 2017
Sayısal Haberleşme Kuramı, Post Graduate, 2016 - 2017
Sinyaller ve Sistemler, Under Graduate, 2016 - 2017
Enformasyon Teorisi, Post Graduate, 2016 - 2017
İletişim Kuramı II, Under Graduate, 2016 - 2017
Sayısal İletişim, Under Graduate, 2016 - 2017
İletişim Kuramı I, Under Graduate, 2016 - 2017
Olasılık ve Rastgele Süreçler, Under Graduate, 2016 - 2017
Enformasyon Teorisi, Post Graduate, 2016 - 2017

Advising Theses

AYDIN E., Design and Performance Analysis of Diversity Schemes for Spatial Modulation with Index Modulation, Post Graduate, F.Çögen(Student), Continues
AYDIN E., Novel Quadrature Spatial Modulation Techniques For Optical MIMO Communication Systems, Post Graduate, C.Arslan(Student), Continues
AYDIN E., Design and Performance Analysis of Spatial Modulation with Index Modulation for Free Space Optical Communication Scheme, Post Graduate, F.Hayır(Student), Continues
AYDIN E., Code Index Modulation Based Cooperative Spatial Modulation, Post Graduate, E.Talbu(Student), Continues

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

- **Generalized Code Index Modulation and Spatial Modulation for High Rate and Energy Efficient MIMO Systems on Rayleigh Block-Fading Channel**
Çögen F., Aydın E., Kabaoğlu N., Başar E., İlhan H.
IEEE Systems Journal, vol.1, no.1, pp.1-9, 2020 (Journal Indexed in SCI)
- **Code-Index Modulation Aided Quadrature Spatial Modulation for High-Rate MIMO Systems**
Aydın E., Çögen F., Başar E.
IEEE Transactions On Vehicular Technology, vol.68, no.10, pp.10257-10261, 2019 (Journal Indexed in SCI)
- **Iterative Receiver with Low Complexity for Downlink Multicarrier Communications over Rapidly Time-Varying Channels**
KABAOĞLU N., ERDOĞAN E., AYDIN E.
WIRELESS COMMUNICATIONS & MOBILE COMPUTING, 2018 (Journal Indexed in SCI)
- **A Novel SM-Based MIMO System With Index Modulation**
Aydın E., İLHAN H.
IEEE COMMUNICATIONS LETTERS, vol.20, pp.244-247, 2016 (Journal Indexed in SCI)

Articles Published in Other Journals

- **EDAS/COAS Based Antenna Selection for Code Index Modulation Aided Spatial Modulation**
AYDIN E.

Refereed Congress / Symposium Publications in Proceedings

- **Hexagonal Quadrature Amplitude Modulation Aided Spatial Modulation**
Cogen F., Aydın E.
11th International Conference on Electrical and Electronics Engineering , Bursa, Turkey, 28 - 30 November 2019, pp.1-4
- **Two-way Code Index Modulation**
AYDIN E., Cogen F.
27nd IEEE Signal Processing and Communications Applications Conference (SIU), Sivas, Turkey, 24 April 2019, pp.1-4
- **Euclidean Distance Based Antenna Selection for Cooperative Spatial Modulation**
AYDIN E.
Elektrik-Elektronik ve Biyomedikal Mühendisliği Konferansı, Bursa, Turkey, 30 November 2018, pp.1-5
- **Code Index Modulation and Spatial Modulation: A New High Rate and Energy Efficient Scheme for MIMO systems**
Çöğen F., Aydın E., Kabaoğlu N., Başar E., İllian H.
IEEE 41st International Conference on Telecommunications and Signal Processing (TSP), Athens, Greece, 04 July 2018, pp.1-4
- **Kod İndis Modülasyonu ve Uzaysal Modülasyon Tabanlı Yeni bir MIMO Sistem**
Çöğen F., AYDIN E., KABAOĞLU N., Başar E., İLLIAN H.
26. IEEE Sinyal İşleme ve Uygulamaları Kurultayı (SIU-2018), İzmir, Turkey, 02 May 2018, pp.1-4
- **SNR-based Relay Selection Scheme for Cooperative Relay Networks**
Aydm E., İllian H.
11th IEEE International Wireless Communications and Mobile Computing Conference (IEEE IWCMC), Dubrovnik, Croatia, 24 - 25 August 2015, pp.448-453
- **Relay Selection with Threshold Value for DF Based Cooperative Systems**
Aydın E., İLHAN H.
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.483-486
- **SNR-based Antenna Selection Schemes for Cooperative Relay Networks in Wireless Channels**
Aydın E., İLHAN H., Ozdemir O.
IEEE Wireless Communications and Networking Conference (WCNC), İstanbul, Turkey, 6 - 09 April 2014, pp.1309-1314
- **Antenna Selection for Decode and Forward Based MIMO Cooperative Networks**
Aydın E., İLHAN H., Ozdemir O.
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.433-436
- **Yapay Sinir Ağları Kullanarak Konuşma Tanıma**
AYDIN E.
6. Mühendislik ve Teknoloji Sempozyumu, Ankara, Turkey, 25 April 2013, pp.1-4
- **SNR-Based Antenna Selection with Threshold Value in Wireless Channels**
Aydın E., İLHAN H., Ozdemir O.
21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 April 2013
- **SMC-Based Iterative Joint MUD Data Detection, Code Delay and Multipath Estimation in DS-CDMA Systems**
AYDIN E., Ali Çırpan H.
Electrical and Electronics Engineering, Bursa, Turkey, 01 November 2011, pp.274-278
- **Bayesian-Based Iterative Blind Joint Data Detection, Code Delay and Channel Estimation for DS-CDMA systems in Multipath Environments**
Aydın E., Çırpan H. A.
7th IEEE International Wireless Communications and Mobile Computing Conference (IWCMC), İstanbul, Turkey, 4 -

08 July 2011, pp.1413-1417

- **An Expectation-Maximization Type Receiver for Uplink of a Hopping System with Time Sharing**

Cam G., Aydın E., Kabaoglu N.

IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009, pp.447-450

- **Time Sharing Hopped Communication in MC - CDMA Systems**

Aydın E.

ELECTRICAL and ELECTRONICS ENGINEERING, Bursa, Turkey, 24 November 2008, pp.1-4

Supported Projects

KABAOĞLU N., ERDOĞAN E., AYDIN E., Project Supported by Higher Education Institutions, Elektrik-Elektronik Mühendisliği Bölümü Antenler ve Mikrodalga Tekniği Laboratuvarı Alt Yapı Projesi, 2020 - Continues

AYDIN E., Çögen F., Project Supported by Higher Education Institutions, Altıgen Karesel Genlik Modülasyonu Tabanlı Uzaysal Modülasyon, 2019 - Continues

AYDIN E., Project Supported by Higher Education Institutions, İşbirlikli Uzaysal Modülasyon İçin Öklid Uzaklığı Tabanlı Anten Seçimi, 2018 - 2019

AYDIN E., KABAOĞLU N., Çögen F., Project Supported by Higher Education Institutions, Uzaysal Modülasyon Tabanlı Kod İndeks Modülasyonlu Yüksek Hızlı Enerji Verimli Yeni Bir MIMO Sistem, 2018 - 2019

AYDIN E., KABAOĞLU N., BAŞAR E., İLHAN H., Çögen F., Project Supported by Higher Education Institutions, Kod İndeks Modülasyonu ve Uzaysal Modülasyon: MIMO Sistemler İçin Yeni Yüksek Hızlı Enerji Verimli Yöntem, 2018 - 2018

ERDOĞAN E., AYDIN E., TUBITAK Project, İşbirlikli Röleli Sistemlerde Karmaşıklık Azaltıcı Yöntemler ve Hata Başarım Analizleri, 2013 - 2016

Memberships / Tasks in Scientific Organizations

IEEE International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC) Symposium, Member of Science Committee, 2020 - Continues

IEEE International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC) Symposium, Member of Science Committee, 2019 - 2019

International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies , Member of Science Committee, 2019 - 2019

Scientific Refereeing

ELECTRONICS LETTERS, SCI Journal, January 2020

ELECTRICA, Journal Indexed in SCIE, December 2019

IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, SCI Journal, December 2019

IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, SCI Journal, November 2019

IEEE TRANSACTIONS ON COMMUNICATIONS, SCI Journal, September 2019

IEEE TRANSACTIONS ON COMMUNICATIONS, SCI Journal, June 2019

AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, SCI Journal, January 2019

IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, SCI Journal, January 2019

IEEE JOURNAL OF SELECTED TOPICS IN SIGNAL PROCESSING, SCI Journal, January 2019

PHYSICAL COMMUNICATION, SCI Journal, November 2018

IET SIGNAL PROCESSING, SCI Journal, October 2018

IEEE Transactions on Vehicular Technology, SCI Journal, September 2018

IEEE International Conference on Wireless and Mobile Computing, Networking and Communications, SCI Journal, July 2018

IEEE Global Communications Conference (GLOBECOM) , SCI Journal, July 2018

IEEE Transactions on Wireless Communications, SCI Journal, December 2016

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES, SCI Journal, November 2016
TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES, SCI Journal, October 2016
TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES, SCI Journal, August 2016
IEEE Wireless Communications and Networking Conference (WCNC), SCI Journal, October 2015
International Journal of Communication Systems, SCI Journal, February 2015
11th International Conference on Electronics, Computer and Computation (ICECCO), SCI Journal, August 2014
IEEE Wireless Communications Letters, SCI Journal, June 2012

Invited Congress and Symposium Activities

International Conference on Electrical and Electronics Engineering (ELECO 2019), Attendee, Bursa, Turkey, 2019
IEEE Signal Processing and Communications Applications Conference (SIU), Attendee, Sivas, Turkey, 2019
International Conference on Electrical and Electronics Engineering (ELECO 2018), Attendee, Bursa, Turkey, 2018
IEEE 41st International Conference on Telecommunications and Signal Processing (TSP), Attendee, Athens, Greece, 2018
IEEE Signal Processing and Communications Applications Conference (SIU), Attendee, İzmir, Turkey, 2018
IEEE 11th International Wireless Communications and Mobile Computing Conference (IWCMC 2015), Attendee, Dubrovnik, Croatia, 2015
IEEE Signal Processing and Communications Applications Conference (SIU), Attendee, Kayseri, Turkey, 2015
IEEE Wireless Communications and Networking Conference (WCNC 2014), Attendee, İstanbul, Turkey, 2014
IEEE Signal Processing and Communications Applications Conference (SIU), Attendee, Trabzon, Turkey, 2014
IEEE Signal Processing and Communications Applications Conference (SIU), Attendee, Girne, Cyprus (Kkctc), 2013
7th International Conference on Electrical and Electronics Engineering (ELECO 2011), Attendee, Bursa, Turkey, 2011
IEEE 7th International Wireless Communications and Mobile Computing Conference (IWCMC 2011), Attendee, İstanbul, Turkey, 2011
Electrical and Electronics Engineering (ELECO 2008), Attendee, Bursa, Turkey, 2008

Citations

Total Citations (WOS):18
h-index (WOS):3

Scholarships

Yurt İçi Doktora Bursu, TUBITAK, 2016 - Continues

Awards

AYDIN E., Best Paper Award, IEEE 2018 41st International Conference on Telecommunications and Signal Processing (TSP)", July 2018
AYDIN E., Elektrik-Elektronik Mühendisliği Bölüm İkinciliği, İstanbul Üniversitesi, June 2007