

Asst. Prof. Emel ARSLAN

Personal Information

Office Phone: [+90 212 473 7070](tel:+902124737070) Extension: 18036

Email: earslan@istanbul.edu.tr

Web: <http://aves.istanbul.edu.tr/earslan/>

Address: İstanbul Üniversitesi-Cerrahpaşa Avcılar Kampüsü Mühendislik Fakültesi B Blok K:6 Bilgisayar Müh. Bölümü Oda No MF8-616 34320 - AVCILAR/İSTANBUL/TÜRKİYE

Education Information

Doctorate, Istanbul University, Institute of Graduate Studies In Sciences, Bilgisayar Mühendisliği, Turkey 2004 - 2011

Postgraduate, Trakya University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, Turkey 2001 - 2004

Undergraduate, Trakya University, Mühendislik Mimarlık Fakültesi, Bilgisayar Mühendisliği, Turkey 1997 - 2001

Associate Degree, Trakya University, Çorlu M.Y.O., Bilgisayar Programcılığı, Turkey 1994 - 1996

Foreign Languages

English, B1 Intermediate

Dissertations

Doctorate, Hücresel Sinir Ağı Sistemleri Kullanarak Hareketli Nesnelerin Görüntü İşleme Uygulamaları, Istanbul University, Institute of Graduate Studies In Sciences, Bilgisayar Mühendisliği, 2011

Postgraduate, Aritmetik Dil Çözümleyici, Trakya University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, 2004

Research Areas

Information Systems, Communication and Control Engineering, Signal Processing, Image and Video Processing, Computer Sciences, Computer Vision, Computer Vision, Artificial Intelligence, Computer Learning and Pattern Recognition, Natural Language Processing, Human Computer Interaction, Pattern Recognition and Image Processing, Software, Programming Languages, Software Engineering, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, İstanbul University-Cerrahpaşa, Faculty Of Engineering, Department Of Computer Engineering, 2018 - Continues

Assistant Professor, Istanbul University, 2018 - 2018

Assistant Professor, Istanbul University, Bilgisayar Mühendisliği, 2012 - 2018

Research Assistant, Trakya University, Mühendislik Mimarlık Fakültesi, Bilgisayar Mühendisliği, 2001 - 2004

Academic and Administrative Experience

Courses

SEZGİSEL ALGORİTMALAR, Postgraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019
İnsan Bilgisayar Etkileşimi, Undergraduate, 2019 - 2020, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015
Kullanıcı Arayüz Tasarımı, Postgraduate, 2019 - 2020, 2017 - 2018, 2016 - 2017, 2015 - 2016
BİTİRME PROJESİ, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019
BİLİŞİM PROJE GELİŞTİRME, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019
Web Programlama, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016
Proje Geliştirme, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015
Web Programlama, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016
Human Computer Interaction, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015
Proje Geliştirme, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015
Bilgisayar Temelleri Ve Programlamaya Giriş, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013
Bilgisayar Temelleri Ve Programlamaya Giriş , Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014
Introduction to Programming, Undergraduate, 2013 - 2014, 2012 - 2013
Introduction to Programming, Undergraduate, 2013 - 2014, 2012 - 2013
Compiler Design, Undergraduate, 2013 - 2014
Compiler Design, Undergraduate, 2013 - 2014

Advising Theses

Arslan E., Yapay Sinir Ağları Kullanılarak Havayolu Bilet Fiyatlarının Dinamik Olarak Belirlenmesi, Doctorate, İ.KOÇ(Student), Continues
Arslan E., İnsan Bilgisayar Etkileşimi Teknikleri Kullanarak Arayüz Kişiselleştirme, Postgraduate, G.ÖZTÜRK(Student), 2019
Arslan E., Görüntü İşleme Teknikleri Kullanarak Profil Tahmini, Postgraduate, N.COROVIC(Student), 2019
Arslan E., Türkiye’de İç Hatlarda Havayolu Yolcu Taleplerinin Yapay Sinir Ağları Kullanarak Tahmini, Postgraduate, İ.KOÇ(Student), 2017
Arslan E., İş Zekası Yöntemleri Kullanarak Kişiselleştirilmiş Rapor Oluşturma, Postgraduate, D.GÜNDÜZ(Student), 2015

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Controller design for finite-time and fixed-time stabilization of fractional-order memristive complex-valued BAM neural networks with uncertain parameters and time-varying delays**
ARSLAN E., Narayanan G., Ali M. S., ARIK S., Saroha S.
NEURAL NETWORKS, vol.130, pp.60-74, 2020 (SCI-Expanded)
- II. **Finite-Time Stability of Stochastic Cohen-Grossberg Neural Networks with Markovian Jumping Parameters and Distributed Time-Varying Delays**
Arslan E., Ali M. S., Saravanan S.
NEURAL PROCESSING LETTERS, vol.46, no.1, pp.71-81, 2017 (SCI-Expanded)
- III. **Event-triggered H-infinity filtering for delayed neural networks via sampled-data**
Arslan E., Vadivel R., Ali M. S., Arik S.
NEURAL NETWORKS, vol.91, pp.11-21, 2017 (SCI-Expanded)
- IV. **Implementation of a Path Detection Algorithm for Moving Images on a CNN Universal Machine**
ARSLAN E., ORMAN Z., ARIK S.
Istanbul University Journal of Electrical and Electronics Engineering, vol.10, no.2, pp.1235-1241, 2011 (SCI-Expanded)

Articles Published in Other Journals

- I. **SOLVING SUDOKU PUZZLE with NUMBERS RECOGNIZED by USING ARTIFICIAL NEURAL NETWORKS**
Sevgen S., Arslan E., Samli R.
ISTANBUL UNIVERSITY-JOURNAL OF ELECTRICAL AND ELECTRONICS ENGINEERING, vol.17, no.1, pp.3205-3211, 2017 (ESCI)
- II. **Implementation Scenarios of Reporting from Data Warehouse for Business Intelligence**
Gündüz D., Azizler M., ARSLAN E.
International Journal of Modeling and Optimization, vol.5, no.3, pp.211-215, 2015 (Peer-Reviewed Journal)
- III. **Feature extraction of objects in moving images and implementation of the purification algorithm on the CNN Universal Machine**
ARSLAN E., ORMAN Z., ARIK S.
International Journal of Circuits, Systems and Signal Processing, vol.5, pp.488-495, 2011 (Scopus)
- IV. **Hareketli Görüntüde Kenar Belirleme Algoritmasının Analog Hücresel Sinir Ağı ve Sayısal İşaret İşleme İşlemcileri Üzerinde Uygulaması**
ARSLAN E., ARIK S.
İstanbul Üniversitesi Mühendislik Bilimleri Dergisi, vol.1, no.1, pp.1-7, 2010 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **A Review on Intelligent Decision Support Systems and a Case Study: Prediction of Cryptocurrency Prices with Neural Networks**
Orman Z., Arslan E., Özbay B., Elmasri E.
in: Neural Networks: History and Applications, Doug Alexander, Editor, NOVA Science Publishers Inc. , New York, pp.189-212, 2020

Refereed Congress / Symposium Publications in Proceedings

- I. **Görüntüdeki İstenmeyen Nesnenin Örnek Tabanlı İçboyama Yöntemiyle Çıkarılması**
YAZICI Ç. N., ÇETİNKOL D., ARSLAN E.
ELECO 2018, Elektrik-Elektronik ve Biyomedikal Mühendisliği Konferansı, Bursa, Turkey, 30 November - 01 December 2018, pp.390-393
- II. **DIAGNOSIS OF ANISOCORIA DISEASE USING IMAGE PROCESSING**
COROVIC N., ARSLAN E.
1st International Symposium on Graduate Research in Science, İstanbul, Turkey, 4 - 06 October 2018, pp.34
- III. **IMPLEMENTATION OF A SELF-ADAPTIVE SYSTEM WITH USABILITY EVALUATION METHODS**
ÖZTÜRK G., ARSLAN E.
1st International Symposium on Graduate Research in Science, İstanbul, Turkey, 4 - 06 October 2018, pp.21
- IV. **Demand Forecasting for Domestic Air Transportation in Turkey using Artificial Neural Networks**
Koc I., Arslan E.
6th International Conference on Control Engineering and Information Technology (CEIT), İstanbul, Turkey, 25 - 27 October 2018
- V. **Predicting Cryptocurrencies Prices with Neural Networks**
Almasri E., Arslan E.
6th International Conference on Control Engineering and Information Technology (CEIT), İstanbul, Turkey, 25 - 27 October 2018
- VI. **ROBUSTNESS ANALYSIS OF DYNAMICAL NEURAL NETWORKS WITH TIME DELAYS**
ARSLAN E., ARIK S.
3rd International Conference on Computer Networks and Information Technology, Pattaya, Thailand, 8 - 09 July

2017, pp.51-58

- VII. **Implementation Scenarios of Reporting from Data Warehouse for Business Intelligence**
Gündüz D., Azizler M., Arslan E.
4th International Conference on System Engineering and Modeling, Rome, Italy, 18 - 19 May 2015, vol.5, no.3, pp.211-215
- VIII. **Number Recognition of Sudoku Grid Image with Artificial Neural Networks**
Sevgen S., Arslan E., Samli R.
22nd International Conference on Neural Information Processing (ICONIP), İstanbul, Turkey, 9 - 12 November 2015, vol.9492, pp.489-496
- IX. **A Generic Implementation Framework for Business Intelligence**
ORMAN Z., ARSLAN E., Gündüz D.
Clute Institue 2014 International Business Conference, San Francisco, United States Of America, 3 - 07 August 2014, pp.151-156
- X. **Detection of objects in moving images and implementation of the purification algorithm on Analog CNN and DSP processors**
ARSLAN E., ORMAN Z., ARIK S.
12th WSEAS International Conference on Neural Networks (NN'11), Romania, 1 - 04 April 2011, pp.60-65
- XI. **Road Traffic Analysis on the CNN Universal Machine**
Arslan E., Orman Z.
World Congress on Engineering and Computer Science (WCECS 2011), San-Francisco, Costa Rica, 19 - 21 October 2011, pp.141-146
- XII. **Hareketli Görüntüden Nesne Silen Algoritmanın Analog HSA ve DSP İşlemciler Üzerinde Uygulaması**
ARSLAN E., ARIK S.
Akıllı Sistemlerde Yenilikler ve Uygulamaları Sempozyumu – ASYU, Kayseri, Turkey, 1 - 04 June 2010, pp.205-209
- XIII. **Removing an Object from Video Sequence Algorithm Implemented on Analog CNN and DSP Microprocessors**
Arslan E., Arik S.
20th International Conference on Artificial Neural Networks, Thessaloniki, Greece, 15 - 18 September 2010, vol.6352, pp.575-576
- XIV. **On the existence of stable equilibrium points in delayed cellular neural networks**
Arslan E., Arik S., Tavsanoglu V.
10th IEEE International Workshop on Cellular Neural Networks and Their Applications, İstanbul, Turkey, 28 - 30 August 2006, pp.231-232
- XV. **An Initial Attempt for the Computational Analysis of Arithmetic Questions in Turkish**
KILICASLAN Y., OZOGUL E.
Proceedings of the International Scientific Conference UNITECH'04, Bulgaria, 1 - 04 November 2004, vol.III, pp.447-452
- XVI. **Wap-Sms-Mail Tabanlı Öğrenci Bilgi Sistemi**
SUÇSUZ N., TAŞKIN D., OZOGUL E.
GAP IV. Mühendislik Kongresi, Şanlıurfa, Turkey, 1 - 04 June 2002, pp.716-723

Supported Projects

ARIK S., ARSLAN E., Project Supported by Higher Education Institutions, Robustness Analysis of Dynamical Neural Networks with Time Delays, 2017 - 2017

ARIK S., SEVGEN S., ŞAMLI R., ARSLAN E., Project Supported by Higher Education Institutions, Parametrik Belirsizlik ile Tanımlanmış Yapay Sinir Ağlarının Kararlılık Analizi, 2016 - 2017

Scientific Refereeing

NEURAL NETWORKS, Journal Indexed in SCI-E, January 2021
PAMUKKALE ÜNİVERSİTESİ MÜHENDİSLİK BİLİMLERİ DERGİSİ, National Scientific Refreed Journal, November 2020
NEURAL NETWORKS, Journal Indexed in SCI-E, November 2020
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, Journal Indexed in SCI-E, October 2020
Neural Processing Letters, Journal Indexed in SCI-E, October 2020
Neurocomputing, Journal Indexed in SCI-E, September 2020
ULUDAĞ ÜNİVERSİTESİ MÜHENDİSLİK FAKÜLTESİ DERGİSİ, National Scientific Refreed Journal, September 2020
NEURAL NETWORKS, Journal Indexed in SCI-E, August 2020
Journal Of The Franklin Institute-Engineering And Applied Mathematics, Journal Indexed in SCI-E, June 2020
PAMUKKALE ÜNİVERSİTESİ MÜHENDİSLİK BİLİMLERİ DERGİSİ, National Scientific Refreed Journal, May 2020
ULUDAĞ ÜNİVERSİTESİ MÜHENDİSLİK FAKÜLTESİ DERGİSİ, National Scientific Refreed Journal, May 2020
IEEE Access, Journal Indexed in SCI-E, February 2020
Journal Of The Franklin Institute-Engineering And Applied Mathematics, Journal Indexed in SCI-E, October 2019
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, August 2019
Computer Standards & Interfaces, Journal Indexed in SCI-E, May 2019
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, October 2018
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, June 2018
The Journal of the Franklin Institute, SCI Journal, April 2018
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, December 2017
Neural Processing Letters, SCI Journal, December 2017
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, June 2017
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, May 2016
TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES, SCI Journal, January 2016
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, November 2015
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, National Scientific Refreed Journal, January 2015
Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, National Scientific Refreed Journal, September 2014
Neurocomputing, SCI Journal, July 2012
Neural Processing Letters, SCI Journal, May 2011
Neurocomputing, SCI Journal, March 2011
Neurocomputing, SCI Journal, February 2011

Metrics

Publication: 25
Citation (WoS): 18
Citation (Scopus): 20
H-Index (WoS): 2
H-Index (Scopus): 2

Awards

ARSLAN E., Awarded as the best paper of the conference, 3rd International Conference on Computer Networks and Information Technology, July 2017
ARSLAN E., Awarded as the best paper of the conference, 4th International Conference on System Engineering and Modeling, May 2015
ARSLAN E., Awarded as the best paper of the conference, 12th WSEAS International Conference on Neural Networks(NN'11), April 2011