

Assoc. Prof. YUNİS TORUN

Personal Information

Email: ytorun@cumhuriyet.edu.tr

Other Email: torun.yunus@gmail.com

Web: <https://avesis.cumhuriyet.edu.tr/ytorun>

Address: Cumhuriyet Üniversitesi, Mühendislik Fakültesi B.Blok, Robolab, Sivas

International Researcher IDs

ScholarID: QuwIXiwAAAAJ

ORCID: 0000-0002-6187-0451

Publons / Web Of Science ResearcherID: AAB-2296-2020

Yoksis Researcher ID: 107812

Education Information

Doctorate, Gaziantep University, Faculty Of Engineering, Turkey 2004 - 2010

Postgraduate, Gaziantep University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering (English), Turkey 2002 - 2004

Undergraduate, Gaziantep University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering (English), Turkey 1996 - 2001

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Novel clustering methods for neurofuzzy systems design, Gaziantep Üniversitesi, Mühendislik Fakültesi, 2010

Postgraduate, Fuzzy logic control and industrial applications, Gaziantep Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü , 2004

Research Areas

Artificial Intelligence, Computer Learning and Pattern Recognition, Clinical Robots, Circuit Theory, Sensing Devices and Transducers, Electronic Circuits

Academic Titles / Tasks

Assistant Professor, Sivas Cumhuriyet University, Mühendislik Fakültesi, Elektrik Elektronik Mühen., 2010 - Continues

Lecturer, Gaziantep University, Gaziantep Vocational School, Department Of Electronics And Automation, 2002 - 2010

Academic and Administrative Experience

Head of Department, Sivas Cumhuriyet University, Fen Bilimleri Enstitüsü, Fen Bilimleri Enstitüsü, 2018 - Continues

Sivas Cumhuriyet Üniversitesi, Mühendislik Fakültesi, 2012 - Continues

Director of the Center, Sivas Cumhuriyet University, Rektörlük, Araştırma Merkezi, 2018 - 2021

Director of the Center, Sivas Cumhuriyet University, Rektörlük, Araştırma Merkezi, 2013 - 2020

Courses

Otomatik Kontrol - II, Undergraduate, 2018 - 2019, 2019 - 2020, 2020 - 2021

Otomatik Kontrol - I, Undergraduate, 2019 - 2020, 2020 - 2021

Bitirme Ödevi, Undergraduate, 2019 - 2020, 2020 - 2021

Programlanabilir Mantık Denetleyiciler (PLC), Undergraduate, 2018 - 2019, 2019 - 2020

Seminer Dersi, Postgraduate, 2019 - 2020, 2020 - 2021

Sinyaller Ve Sistemler, Undergraduate, 2019 - 2020, 2020 - 2021

Arıza Teşhisi ve Yalıtımı, Postgraduate, 2019 - 2020, 2020 - 2021

Tez Çalışması, Postgraduate, 2018 - 2019, 2019 - 2020, 2020 - 2021

HATA TEŞHİSİ VE İZOLASYONU, Doctorate, 2019 - 2020

İleri Mühendislik Matematiği ve Modelleme, Postgraduate, 2019 - 2020, 2020 - 2021

Uzmanlık Alan Dersi, Postgraduate, 2019 - 2020

Bitirme Ödevi, Undergraduate, 2019 - 2020

Programlanabilir Mantık Denetleyiciler (PLC), Undergraduate, 2018 - 2019

Sinyaller Ve Sistemler, Undergraduate, 2019 - 2020

Otomatik Kontrol - I, Undergraduate, 2019 - 2020

Arıza Teşhisi ve Yalıtımı, Postgraduate, 2019 - 2020

Otomatik Kontrol - II, Undergraduate, 2018 - 2019

Otomatik Kontrol Laboratuvarı, Undergraduate, 2016 - 2017

Mühendislik Projeleri, Undergraduate, 2017 - 2018

Mühendislik Projeleri, Undergraduate, 2017 - 2018

Elektrik Ölçme Lab., Undergraduate, 2014 - 2015

Elektrik Ölçme Lab., Undergraduate, 2014 - 2015

Mikroişlemciler, Undergraduate, 2012 - 2013

Devre Teorisi - II, Undergraduate, 2011 - 2012

Devre Teorisi-2, Undergraduate, 2011 - 2012

Bilgisayar Uygulamaları, Undergraduate, 2011 - 2012

Devre Teorisi - II, Undergraduate, 2011 - 2012

Bilgisayar Uygulamaları, Undergraduate, 2011 - 2012

Mikroişlemciler, Undergraduate, 2011 - 2012

Devre Teorisi - I, Undergraduate, 2011 - 2012

Devre Teorisi-1, Undergraduate, 2011 - 2012

Modern Kontrol Teorisi, Postgraduate, 2010 - 2011

Devre Teorisi - I, Undergraduate, 2011 - 2012

Bulanık (Fuzzy) Mantık Kontrol Sistemleri, Postgraduate, 2010 - 2011

Advising Theses

Torun Y., Otonom keşif amaçlı robot sistemleri için geri dönüş rotası hesaplama algoritması geliştirilmesi, Postgraduate, N.ALPKIRAY(Student), 2019

Torun Y., Robotik cerrahi matkaplarda güç analizi ile matkap ucu çıkış tespiti, Postgraduate, A.ÖZTÜRK(Student), 2019
TORUN Y., Rüzgâr türbinlerinde kullanılan çift beslemeli indüksiyon jeneratörünün (DFIG) akım sensöründeki hataların Takagi-Sugeno (T-S) modeli kullanarak ve parametre değişimini göz önünde bulundurularak algılanması ve teşhisi,

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Neural network estimations of annealed and non-annealed Schottky diode characteristics at wide temperatures range**
DOĞAN H., Duman S., TORUN Y., AKKOYUN S., Doğan S., ATİCİ U.
Materials Science in Semiconductor Processing, vol.149, 2022 (Peer-Reviewed Journal)
- II. **MODELING OF PATELLA HEIGHT WITH DISTAL FEMUR AND PROXIMAL TIBIA REFERENCE POINTS WITH ARTIFICIAL NEURAL NETWORK**
Otağ İ., Çimen K., Torun Y., Pazarıcı Ö., Akkoyun S., Otağ A., Çimen M.
JOURNAL OF MECHANICS IN MEDICINE AND BIOLOGY, vol.2, no.22, pp.2250015-2250020, 2022 (Peer-Reviewed Journal)
- III. **Modeling of Schottky diode characteristic by machine learning techniques based on experimental data with wide temperature range**
TORUN Y., DOĞAN H.
Superlattices and Microstructures, vol.160, 2021 (Peer-Reviewed Journal)
- IV. **Neuro-fuzzy modeling of deformation parameters for fusion-barriers**
Akkoyun S., Torun Y.
NUCLEAR ENGINEERING AND TECHNOLOGY, vol.53, no.5, pp.1612-1618, 2021 (Peer-Reviewed Journal)
- V. **Estimations of first 2(+) energy states of even-even nuclei by using artificial neural networks**
AKKOYUN S., KAYA H., TORUN Y.
INDIAN JOURNAL OF PHYSICS, 2021 (Peer-Reviewed Journal)
- VI. **Parametric Power Spectral Density Estimation-Based Breakthrough Detection for Orthopedic Bone Drilling with Acoustic Emission Signal Analysis**
TORUN Y., PAZARCI Ö.
Acoustics Australia, vol.48, pp.221-231, 2020 (Peer-Reviewed Journal)
- VII. **A New Breakthrough Detection Method for Bone Drilling in Robotic Orthopedic Surgery with Closed-Loop Control Approach**
TORUN Y., Ozturk A.
ANNALS OF BIOMEDICAL ENGINEERING, vol.48, no.4, pp.1218-1229, 2020 (Peer-Reviewed Journal)
- VIII. **Designing simulated annealing and subtractive clustering based fuzzy classifier**
Torun Y., Tohumolu G.
Applied Soft Computing Journal, vol.11, no.2, pp.2193-2201, 2011 (Peer-Reviewed Journal)
- IX. **Fuzzy logic control to be conventional method**
Eker I., Torun Y.
Energy Conversion and Management, vol.47, no.4, pp.377-394, 2006 (Peer-Reviewed Journal)

Articles Published in Other Journals

- I. **Simulation of Disturbance Observer-Based Bone Tissue Change Prediction Approach for Orthopedic Drills**
Torun Y.
Türk Doğa ve Fen Dergisi, vol.11, no.1, pp.136-141, 2022 (Peer-Reviewed Journal)
- II. **Estimation of Tibia Length in Turkish Adults Using the Artificial Neural Network Method**
PAZARCI Ö., TORUN Y.
International Journal of Academic Medicine and Pharmacy, no.1, pp.29-34, 2021 (Peer-Reviewed Journal)
- III. **Design of Luenberg State Observer Based Resolver to Digital Converter in Permanent Magnet Synchronous Motors for Position Accuracy**

Torun Y., Aksöz A.

Gazi Üniversitesi Fen Bilimleri Dergisi Part C, vol.8, no.3, pp.500-510, 2020 (Peer-Reviewed Journal)

- IV. **Estimation of the future fracture epidemiology in the patients applying to the emergency department with long short time memory method**
PAZARCI Ö., TORUN Y., AKKOYUN S.
Cumhuriyet Science Journal, vol.41, no.3, pp.741-746, 2020 (Peer-Reviewed Journal)
- V. **Comparative Study of Different Drills for Bone Drilling: A Systematic Approach**
PAZARCI Ö., TORUN Y., ÖZTÜRK A., ÖZTEMÜR Z.
Malaysian Orthopaedic Journal, vol.14, no.2, pp.83-89, 2020 (Peer-Reviewed Journal)
- VI. **POWER ANALYSIS OF ROBOTIC MEDICAL DRILL WITH DIFFERENT CONTROL APPROACHES**
TORUN Y., MALATYALI S.
Cumhuriyet Science Journal, vol.41, no.2, pp.527-533, 2020 (Peer-Reviewed Journal)
- VII. **Current Approaches to Bone-Drilling Procedures with Orthopedic Drills**
TORUN Y., PAZARCI Ö., ÖZTÜRK A.
Cyprus Journal of Medical Sciences, vol.5, no.1, pp.93-98, 2020 (Peer-Reviewed Journal)
- VIII. **Pozisyon doğruluğu için SMSM'lerde Luenberg durum gözlemcisi tabanlı RDK tasarımı**
Aksöz A., Torun Y.
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.8, no.3, pp.500-510, 2020 (Peer-Reviewed Journal)
- IX. **Optimum Enerji Verimliliğini Hedefleyen Rastgele Ağaçlar ve Yapay Arı Kolonisi Yöntemi ile Otonom Robotlarda Yol Planlama Algoritması**
Torun Y., Ergül Z., Aksöz A.
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.7, no.4, pp.903-915, 2019 (Peer-Reviewed Journal)
- X. **Modeling and Linearization of DFIG Based Wind Turbine**
BAYAT M. M. , TORUN Y.
European Scientific Journal, pp.158-168, 2017 (Peer-Reviewed Journal)
- XI. **Cevik Yazılım Gelistirme Yaklaşımı ile Beden Eğitimi özel Yetenek Sınav Otomasyon Sisteminin Tasarımı**
YÜKSEK A. G. , ARSLAN H., TÜRKAY Y., KAYNAR O., TORUN Y.
Istanbul Aydın Üniversitesi Dergisi, vol.8, no.29, pp.79-99, 2016 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Decision-Making for Biomass Harvesting Routing by using the Simulated Annealing**
ATICI U., TORUN Y., Darendelioğlu D.
in: Optimization and Decision-Making in the Renewable Energy Industry, Balo Fige, Topal Ayşe, Demir Ezgi, Ulutaş Alptekin, Editor, IGI GLOBAL, New York, pp.153-181, 2022

Refereed Congress / Symposium Publications in Proceedings

- I. **BİYOKÜTLE ENERJİSİ ÜRETİMİ İÇİN ÇOKLU KAPASİTELİ ARAÇ ROTALAMA PROBLEMİ**
Darendelioğlu D., Atici U., Torun Y.
ULUSLARARASI İKİSAD İKTİSAT KONGRESİ, Ankara, Turkey, 26 - 27 February 2022, pp.1
- II. **ÇİFT BESLEMELİ İNDÜKSİYON GENERATÖRÜNÜN (DFIG) AKIM SENSÖRÜNDEKİ HATALARIN TAKAGİ-SUGENO (T-S) FUZZY MODELİ KULLANILARAK TEŞHİSİ**
BAYAT M. M. , TORUN Y.
2. Rumeli Sürdürülebilir Çevre için Enerji ve Tasarım Sempozyumu (2.SUCET), İstanbul, Turkey, 17 - 18 February 2022, pp.182-189

- III. **Mermer Sınıflandırılması İçin Bir Makineli Görü Sistem Geliştirilmesi**
TORUN Y.
SİU 2019, 24 - 26 April 2019
- IV. **Development a Machine Vision System For Marble Classification**
TORUN Y., Akbaş M. R. , Çelik M. A. , KAYNAR O.
2019 27th Signal Processing and Communications Applications Conference (SIU), Sivas, Turkey, 24 - 26 April 2019
- V. **Parameters Estimation of Orthopedic Drill**
TORUN Y., Ozturk A., AKSÖZ A., Pazarci O.
27th Signal Processing and Communications Applications Conference (SIU), Sivas, Turkey, 24 - 26 April 2019
- VI. **Breakthrough Detection for Orthopedic Bone Drilling via Power Spectral Density Estimation of Acoustic Emission**
TORUN Y., Öztürk A., Hatipoğlu N., ÖZTEMÜR Z.
Uluslararası Katılımlı Elektrik - Elektronik, Bilgisayar, Biyomedikal Mühendislikleri Bilimsel Toplantısı (EBBT 2018), 18 - 19 April 2018
- VII. **Probabilistic Roadmap and Artificial Bee Colony Algorithm Cooperation For Path Planning**
Alpkiray N., TORUN Y., KAYNAR O.
International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 28 - 30 September 2018
- VIII. **Detection of Bone Excretion with Current Sensor in Robotic Surgery**
TORUN Y., ÖZTÜRK A., Hatipoglu N., ÖZTEMÜR Z.
3rd International Conference on Computer Science and Engineering (UBMK), Sarajevo, Bosnia And Herzegovina, 20 - 23 September 2018, pp.185-189
- IX. **Automatic Classification of Natural Stone Tiles with Computer Vision**
KAYNAR O., TORUN Y., TEMİZ M., GÖRMEZ Y.
3rd International Conference on Computer Science and Engineering (UBMK), Sarajevo, Bosnia And Herzegovina, 20 - 23 September 2018, pp.527-532
- X. **Modeling and Linearization of DFIG Based Wind Turbine**
BAYAT M. M. , TORUN Y.
6th Eurasian Multidisciplinary Forum, EMF 2017, 27-28 April, Vienna, Austria, 27 - 28 April 2017
- XI. **A new fuzzy classifier based on simulated annealing and subtractive clustering**
TORUN Y., TOHUMOĞLU G.
2009 IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009
- XII. **Veri Kümeleme Yöntemlerininin Rahim Ağzı Kanserinde Kullanımı**
TORUN Y., TOHUMOĞLU G.
Akıllı Sistemlerde Yenilikler ve Uygulamalar, ASYU, Turkey, 12 August 2008, vol.1
- XIII. **Experimental Application Of Fuzzy Logic Control To An Electrical Drive System International Conference On Intelligent Knowledge Systems**
TORUN Y., EKER İ.
International Conference On Intelligent Knowledge Systems, 7 - 08 August 2004, vol.1

Supported Projects

Torun Y., TUBITAK Project, MERMER PLAKA SINIFLANDIRMA SİSTEM TASARIMI, 2022 - 2023

Torun Y., Uyaroğlu A., Energy and Natural Resources Ministry, BETONARME DİREKLERDE GÜVENLİ TIRMANMA ROBOTU TASARIMI (POLE CLIMBING ROBOT), 2021 - 2023

Torun Y., Gözükırmızı A. S. , TUBITAK Project, Yapay Zeka Tabanlı İplik Bobin Analiz Sistemi, 2021 - 2021

Torun Y., Genç O., TUBITAK Project, MERMER PLAKA SINIFLANDIRMASI İÇİN GÖMÜLÜ SİSTEM GELİŞTİRİLMESİ, 2020 - 2021

Kaya H., Ünsal Çelimli D. B. , Aksöz A., Akkoyun S., Torun Y., Project Supported by Higher Education Institutions, Enerji verimliliği yaklaşımı ile Akıllı Kampüs Aydınlatma Projesi; Sivas Cumhuriyet Üniversitesi Uygulaması, 2019 - 2020

Torun Y., Öztürk A., Project Supported by Higher Education Institutions, Robotik Cerrahi Matkaplar da Enerji Analizi ile Matkap Ucu Çıkış Tespiti, 2018 - 2019
Torun Y., Project Supported by Higher Education Institutions, Robotik Medikal Matkaplarda Güç Analizi ve Optimizasyonu, 2018 - 2019
TORUN Y., Project Supported by Higher Education Institutions, Rüzgâr Türbinlerinde kullanılan çift beslemeli indüksiyon generatorünün (DFIG) akım sensöründeki hataların Takagi-Sugeno (T-S) modeli kullanılarak ve parametre değişimini göz önünde bulundurularak algılanması ve teşhisi, 2017 - 2017
Torun Y., AB IPA Project, TRH2 2 IQVETII P 03 977 Robot Laboratuvarının Kurulması ve Sanayi İşbirliği İle Uygulaması Robot Eğitimlerinin Verilmesi, 2014 - 2015
TORUN Y., Industrial Thesis Project, Santez 01470 STZ 2012 2, 2013 - 2015

Scientific Refereeing

TUBITAK Project, 1501 - Industry R & D Projects Support Program, ÇOK KANALLI ANALİZÖR ENTES ELEKTRONİK CİHAZLAR İMALAT VE TİCARET A.Ş, Turkey, September 2020
TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, xx, Turkey, June 2020
TUBITAK Project, 1501 - Industry R & D Projects Support Program, FANKOM MÜHENDİSLİK MAKİNA ENERJİ VE BİLGİSAYAR TİCARET LİMİTED ŞİRKETİ, Turkey, May 2020
TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, xxx, Turkey, April 2020
TUBITAK Project, 1509 - TÜBİTAK International Industry R&D Projects Support Program, xxx, Turkey, April 2020
TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, xxx, Turkey, March 2020
TUBITAK Project, 1501 - Industry R & D Projects Support Program, xxx, Turkey, March 2020
ACOUSTICS AUSTRALIA, SCI Journal, January 2020
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, SCI Journal, December 2019

Tasks In Event Organizations

Kavak K. Ş., Karaköy T., Özdemir Ş., Mısırhoğlu A., Torun Y., Tarım, Gıda ve Biyoteknolojide ARGE Yenilik ve Proje Pazarı 2019 (TÜBİTAK TEYDEB 1503 Proje Pazarı Etkinliği Programı (APP-258), Scientific Congress, Sivas, Turkey, Kasım 2019
Torun Y., 27.Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Scientific Congress, Sivas, Turkey, Nisan 2019

Metrics

Publication: 39
Citation (WoS): 96
Citation (Scopus): 146
H-Index (WoS): 3
H-Index (Scopus): 4

Awards

Torun Y., 2209-B SANAYİ ODAKLI BİTİRME TEZLERİ- SÜREÇ GELİŞTİRME- Türkiye 1.cisi, Tubitak, July 2014

Non Academic Experience

Ministry, Sanayi ve Teknoloji Bakanlığı