

## Asst. Prof. İLKER DALKIRAN

### Personal Information

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### International Researcher IDs

ORCID: 0000-0003-2448-3556

Publons / Web Of Science ResearcherID: AAO-8405-2021

ScopusID: 14036906500

Yoksis Researcher ID: 161768

### Biography

İlker DALKIRAN was born in Kayseri in 1977. At 2001, he get the "Electronics Engineer" title from Dept. of Electronics Engineerin of Erciyes University. He has started to work an academic staff at the same department at the same year.

### Education Information

Post Doctorate, University of Wisconsin-Madison, Department Of Physics, United States Of America 2011 - 2012

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, Elektronik Mühendisliği, Turkey 2003 - 2010

Postgraduate, Erciyes University, Fen Bilimleri Enstitüsü, Elektronik Mühendisliği, Turkey 2001 - 2003

Undergraduate, Erciyes University, Mühendislik Fakültesi, Elektronik Mühendisliği, Turkey 1996 - 2001

### Certificates, Courses and Trainings

Quality Management, Ölçme Değerlendirme Eğiticilerin Eğitimi Çalıştayı, Erciyes Üniversitesi Rektörlüğü, 2017

### Dissertations

Doctorate, Yapay Sinir Ağı Tabanlı Kaotik İşaret Üretici Tasarımı ve Uygulamaları, Erciyes Üniversitesi, Fen Bilimleri Enstitüsü, Elektronik Mühendisliği, 2010

Postgraduate, Yapay Zeka Tekniği Kullanan Bilgisayar Tabanlı Yüksek Hassasiyetli Sıcaklık Ölçme Birimi Tasarımı, Erciyes Üniversitesi, Fen Bilimleri Enstitüsü, Elektronik Mühensiliği, 2003

### Research Areas

Electrical and Electronics Engineering, Electronic, Electronic Circuits, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Erciyes University, Mühendislik Fakültesi, Elektrik- Elektronik Mühendisliği, 2010 - Continues  
Assistant Professor, The University of Wisconsin Madison, Department Of Physics, Department Of Physics, 2011 - 2012  
Research Assistant, Erciyes University, Mühendislik Fakültesi, Elektrik- Elektronik Mühendisliği, 2001 - 2010

## Academic and Administrative Experience

Head of Department, Erciyes University, Mühendislik Fakültesi, Elektrik- Elektronik Mühendisliği, 2021 - Continues  
Erciyes Üniversitesi, Mühendislik Fakültesi, Elektrik- Elektronik Mühendisliği, 2015 - 2018  
Erciyes University, 2015 - 2018

## Courses

MİKRODENETLEYİCİLER, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013  
MİKRODENETLEYİCİLER, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013  
MÜHENDİSLİK MATEMATİĞİ II, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018  
MÜHENDİSLİK MATEMATİĞİ II, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018  
ELEKTRONİK BİLGİ GÜVENLİĞİNDE MODERN YÖNTEMLER, Postgraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013  
BİLGİ ŞİFRELEME YÖNTEMLERİ, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013  
GÖMÜLÜ SİSTEMLER, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017  
KAVRAMSAL BİLGİ GÜVENLİĞİ, Postgraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013  
BİLGİ GÜVENLİĞİ, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018  
GÖMÜLÜ SİSTEMLER, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018  
BİLGİ GÜVENLİĞİ, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2014 - 2015  
BİLGİ ŞİFRELEME YÖNTEMLERİ, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015  
BİLGİ ŞİFRELEME YÖNTEMLERİ, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016  
BİLGİ ŞİFRELEME YÖNTEMLERİ, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015  
ELEKTRİK - ELEKTRONİK MÜHENDİSLİĞİNE GİRİŞ, Undergraduate, 2015 - 2016

## Advising Theses

Dalkıran İ., Stock market prediction with deep learning techniques, Postgraduate, M.OZAN(Student), 2020  
Dalkıran İ., Estimation of Lyapunov exponents using artificial neural networks, Postgraduate, K.FETHİ(Student), 2019  
Dalkıran İ., Investigation of central pattern generator structures using microprocessor architecture, Postgraduate, V.BURAK(Student), 2019

## Jury Memberships

Post Graduate, YÜKSEK LİSANS TEZ SAVUNMASI, ERCİYES ÜNİVERSİTESİ FEN BİLİMLERİ ENSTİTÜSÜ, April, 2018  
Doctorate, DOKTORA TEZ SAVUNMASI, ERCİYES ÜNİVERSİTESİ FEN BİLİMLERİ ENSTİTÜSÜ, December, 2017  
Academic Staff Examination, ARAŞTIRMA GÖREVLİSİ ALIMI, ERCİYES ÜNİVERSİTESİ MÜHENDİSLİK FAKÜLTESİ,

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Artificial neural network based chaotic generator for cryptology**  
DALKIRAN I., DANIŞMAN K.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.18, no.2, pp.225-240, 2010  
(SCI-Expanded)
- II. **Modelling of the hysteresis effect of target voltage in reactive magnetron sputtering process by using neural networks**  
DANIŞMAN K., DANISMAN S., SAVAŞ S., DALKIRAN I.  
SURFACE & COATINGS TECHNOLOGY, vol.204, no.5, pp.610-614, 2009 (SCI-Expanded)
- III. **Design of a high precision temperature measurement system based on artificial neural network for different thermocouple types**  
Danisman K., DALKIRAN I., CELEBI F. V.  
MEASUREMENT, vol.39, no.8, pp.695-700, 2006 (SCI-Expanded)
- IV. **Injection level dependence of the gain, refractive index variation, and alpha (alpha) parameter in broad-area InGaAs deep quantum-well lasers**  
CELEBI F. V., Dalkiran I., Danisman K.  
OPTIK, vol.117, no.11, pp.511-515, 2006 (SCI-Expanded)
- V. **Design of a high precision temperature measurement system**  
Danisman K., Dalkiran I., CELEBI F. V.  
ADVANCES IN NEURAL NETWORKS - ISSN 2006, PT 3, PROCEEDINGS, vol.3973, pp.997-1004, 2006 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Predicting Of Stock Market Using Deep Learning Techniques**  
Dalkiran İ., Ozan M.  
3rd International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 20 - 23 July 2022, pp.832
- II. **Izhikevich Sinir Hücresi Modelinin Raspberry Pi Kullanılarak Gerçekleştirilmesi**  
YÜCEDAĞ V. B., DALKIRAN I.  
2. International Symposium on Innovative Approaches in Scientific Studies, Samsun, Turkey, 30 November - 02 December 2018, vol.3, pp.1239-1241
- III. **Morris-Lecar Sinir Hücresi Modelinin Çeşitli Uyarıcı Akımlarının Uygulanması Sonucunda Zar Potansiyelindeki Değişimin İncelenmesi**  
YÜCEDAĞ V. B., DALKIRAN I.  
UMTEB III. Uluslararası Mesleki Ve Teknik Bilimler Kongresi, Gaziantep, Turkey, 21 - 22 June 2018, pp.823
- IV. **A Sample Central Pattern Generator Implementation On Raspberry Pi**  
YÜCEDAĞ V. B., DALKIRAN I.  
International Symposium on Industry 4.0 and Applications, ISIA 2017, Karabük, Turkey, 12 - 14 October 2017, pp.227-230
- V. **Kaotik Chua Devresinin Dinamiklerinin YSA ile Tahmin Edilmesi**  
DALKIRAN İ., YILDIRIM DALKIRAN F., DANIŞMAN K., KILIÇ R.  
IEEE 15. Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU 2007), Eskişehir, Turkey, 11 - 13 June 2007
- VI. **Prediction of dynamics of chaotic Chua's circuit with artificial neural network**  
DALKIRAN İ., DALKIRAN F., DANIŞMAN K., KILIÇ R.  
IEEE 15th Signal Processing and Communications Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007,

pp.684-685

- VII. **E-Tipi Termal Çiftin Çıkışının Yapay Sinir Ağları Ve Bulanık Sinir Ağları İle Doğrusallaştırılması**  
DALKIRAN I., DANIŞMAN K.  
IEEE 14. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, IEEE SİU 2006, Antalya, Turkey, 17 - 19 April 2006, pp.1-4
- VIII. **Linearizing E-type thermocouple output using artificial neural network and adaptive neuro-fuzzy inference systems**  
DALKIRAN İ., DANIŞMAN K.  
2006 IEEE 14TH SIGNAL PROCESSING AND COMMUNICATIONS APPLICATIONS, VOLS 1 AND 2, Antalya, Turkey, 16 - 19 April 2006, pp.1-4
- IX. **Design of a high precision temperature measurement system**  
DANIŞMAN K., DALKIRAN İ., Celebi F. V.  
3rd International Symposium on Neural Networks, ISNN 2006 - Advances in Neural Networks, Chengdu, China, 28 May - 01 June 2006, pp.997-1004
- X. **Enerji İzleme Sistemlerinde Kullanılan İletişim Teknolojilerinin Karşılaştırılması ve GPRS İletişim Teknolojisinin Otomatik Sayaç Okuma Sistemine Uygulanması**  
ÖZDEMİR A. T., DANIŞMAN K., DALKIRAN I.  
İletişim Teknolojileri Ulusal Sempozyumu, İTUSEM 2005, Adana, Turkey, 17 - 19 November 2005, pp.131-134
- XI. **Yapay Sinir Ağı Tabanlı Doğrusallaştırma Birimi Tasarımı**  
EROĞLU N., DALKIRAN I., DANIŞMAN K.  
11. Elektrik Elektronik Bilgisayar Mühendisliği Ulusal Kongresi, İstanbul, Turkey, 22 - 25 September 2005, pp.255-258
- XII. **An Artificial Neural Network to Linearize Different Thermocouple Characteristics**  
DANIŞMAN K., DALKIRAN I.  
International XII. Turkish Symposium on Artificial Intelligence and Neural Networks – TAINN 2003, Çanakkale, Turkey, 2 - 04 July 2003, pp.1-7

## Supported Projects

DALKIRAN İ., YÜCEDAĞ V. B., Project Supported by Higher Education Institutions, SİNİR HÜCRELERİNDE GÜRÜLTÜ KAVRAMI VE SENKRONİZASYONA ETKİLERİNİN İNCELENMESİ, 2022 - Continues

## Metrics

Publication: 23

Citation (WoS): 95

Citation (Scopus): 185

H-Index (WoS): 4

H-Index (Scopus): 5

## Scholarships

DOKTORA SONRASI ARAŞTIRMA DESTEĞİ, YOK, 2011 - Continues

## Awards

DALKIRAN I., BİLİMSEL YAYIN ÖDÜLÜ, ERCİYES ÜNİVERSİTESİ, January 2007

DALKIRAN I., BİLİMSEL YAYIN ÖDÜLÜ, ERCİYES ÜNİVERSİTESİ MÜHENDİSLİK FAKÜLTESİ, January 2007

## **Non Academic Experience**

University of Wisconsin - Madison