Assoc. Prof. İSMAİL YABANOVA

Personal Information

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International Researcher IDs
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ScopusID: 26666341700
Yoksis Researcher ID: 23112

Education

Doctorate, Sakarya University, Turkey 2007 - 2012
Postgraduate, Afyon Kocatepe University, Turkey 2004 - 2007
Undergraduate, Marmara University, Faculty Of Technical Education, Electric Education, Turkey 2000 - 2004

Foreign Languages

English

Dissertations

Doctorate, Esnek üretim sisteminin gerçek zamanlı uzaktan erişimli kontrolü ve mekatronik eğitimine uygulanması, Sakarya University, 2011
Postgraduate, Otomatik stoklama ve stok yenileme sistemlerinin incelenmesi ve mermer sektörüne yönelik bir uygulama, Afyon Kocatepe University, 2007

Research Areas

Avesis Research Areas: Electrical and Electronics Engineering
WoS Research Areas: Engineering Electrical & Electronic, Computer Science Artificial Intelligence, Automation & Control Systems
Scopus Research Areas: Computer Vision and Pattern Recognition

Academic Positions

Associate Professor, Manisa Celal Bayar University, HASAN FERDİ TURGUTLU TEKNOLOJİ FAKÜLTESİ, ELEKTRİK MÜHENDİSLİĞİ, 2022 - Present
Associate Professor, Afyon Kocatepe University, 2019 - 2022
Associate Professor, Afyon Kocatepe University, 2018 - 2019

Afyon Kocatepe University, 2012 - 2018
Research Assistant, Afyon Kocatepe University, 2004 - 2012

Courses

Undergraduate
Esnek İmalat Sistemleri, Undergraduate, 2016-2017, 2015-2016, 2014-2015
Bilgisayar Destekli Çizim, Undergraduate, 2016-2017, 2015-2016, 2014-2015, 2013-2014, 2012-2013
Bilgisayar Programlama, Undergraduate, 2015-2016, 2014-2015, 2013-2014, 2012-2013
Sayısal Elektronik, Undergraduate, 2013-2014
Kumanda Teknikleri, Undergraduate, 2013-2014, 2012-2013
Analog Elektronik, Undergraduate, 2013-2014
Fabrika Otomasyonu, Undergraduate, 2012-2013
Mekatronik ve Robotik, Undergraduate, 2012-2013
Undergraduate Double Major
Mekatronik, Undergraduate Double Major, 2016-2017, 2015-2016, 2014-2015, 2013-2014
Proses Kontrol ve Enstrümantasyon Teknolojisi, Undergraduate Double Major, 2015-2016, 2014-2015, 2013-2014

Supervised Theses

YABANOVA İ., Ses sinyallerini kullanarak yumurta kabuğundaki çatlakların tespiti, Postgraduate, Z.BALCI(Student), 2018
YABANOVA İ., Gerçek zamanlı bir görüntü işleme sisteminin model tabanlı olarak tasarlanması, Postgraduate, M.YUSUF(Student), 2018
YABANOVA İ., Dinamik ağırlık ölçümü için filtre tasarımı, Postgraduate, M.YANIK(Student), 2017
YABANOVA İ., Görüntü işleme tekniği ile korunan alanlarda kaynak değeri oluşturan yaban hayvanlarının envanterine yönelik tür ve sayı tespiti yapılması, Postgraduate, K.KAYA(Student), 2017

Articles

I. **Application of characteristic curves appropriate for relay coordination in adaptive protection networks containing distributed generation facilities**
Akkan R., Çimen H., YABANOVA İ., Yenil V.
Journal of Renewable and Sustainable Energy, vol.18, no.3, 2026 (SCI-Expanded, Scopus)

II. **An acoustic signal-to-image conversion integrated convolutional neural network model for egg crack detection**
Balcı Z., YABANOVA İ., Mert A.
BRITISH POULTRY SCIENCE, vol.67, no.2, pp.224-232, 2026 (SCI-Expanded, Scopus)

III. **A new relay coordination application in adaptive protection network containing distributed generation facilities**
Akkan R., Cimen H., YABANOVA İ., Yenil V.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.41, no.1, pp.719-730, 2026 (SCI-Expanded, Scopus, TRDizin)

IV. **Overcurrent Relay Coordination in Adaptive Protected Networks with Integrated Wind Energy**
AKKAN R., Çimen H., YABANOVA I., YENİL V.
Journal of Materials and Mechatronics:A (Online), vol.6, no.2, pp.366-380, 2025 (TRDizin)

V. **Design of a Dynamic Weighing System and AI-Based Sorting Process for Egg Sorting Machines**
YABANOVA İ., Yumurtacı M., Ünler T.
Tarim Bilimleri Dergisi, vol.31, no.3, pp.802-813, 2025 (SCI-Expanded, Scopus)

VI. **CANaerospace Protokolü ve LabVIEW Tabanlı Veri İletişim Uygulaması**
ÜNLER T., YABANOVA İ.
ASREL, vol.4, no.1, pp.36-48, 2025 (Peer-Reviewed Journal)

VII. **Implementation of Single-Scan Connected Component Labeling for FPGA Hardware**
YABANOVA İ., ÜNLER T.
Necmettin Erbakan Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.7, no.1, pp.12-21, 2025 (Peer-Reviewed Journal)

VIII. **Autoencoder-Based Eggshell Crack Detection Using Acoustic Signal**
YABANOVA İ., Balcı Z., Yumurtacı M., Ünler T.
Journal of Food Process Engineering, vol.47, no.11, 2024 (SCI-Expanded, Scopus)

IX. **Artificial Intelligence Based Determination of Cracks in Eggshell Using Sound Signals**
Balcı Z., YABANOVA İ.
Sakarya University Journal of Science, vol.26, no.3, pp.579-589, 2022 (Scopus, TRDizin)

X. **THE DETECTION OF EGGSHELL CRACKS USING DIFFERENT CLASSIFIERS**
YUMURTACI M., BALCI Z., ERGİN S., YABANOVA İ.
Eskişehir Technical University Journal of Science and and Technology A- Applied Sciences and Engineering, vol.23, no.2, pp.161-172, 2022 (TRDizin)

XI. **Yumurta Kabuğundan Alınan Akustik Sinyalin Dalgacık Paket Dönüşümü ve Entropiye Dayalı Olarak İşlenmesi ve Yapay Sinir Ağlarıyla Çatlağın Belirlenmesi**
BALCI Z., YUMURTACI M., YABANOVA İ., ERGİN S.
Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, vol.8, no.1, pp.125-135, 2021 (TRDizin)

XII. **Hareketli Ürünlerin Sayımı için Kızılötesi Tabanlı Sensör Dizaynı ve Yumurta Sayma Uygulaması**
YABANOVA İ., YUMURTACI M.
Journal of Materials and Mechatronics:A (Online), vol.2, no.2, pp.141-149, 2021 (TRDizin)

XIII. **WEIGHT-BASED CLASSIFICATION OF EGGS USING SEVERAL STATE-OF-THE-ART CLASSIFIERS ON A MECHANICAL WEIGHING SYSTEM INTEGRATED WITH A DSP MICROCONTROLLER**
ELİBOL SEÇİL G., YUMURTACI M., ERGİN S., YABANOVA İ.
Eskişehir Technical University Journal of Science and and Technology A- Applied Sciences and Engineering, vol.21, no.4, pp.499-513, 2020 (Peer-Reviewed Journal)

XIV. **LabVIEW ve Mikro-denetleyici Tabanlı Sıcaklık Kontrol Sistemi Tasarımı**
ÇINAR S. M., FİDAN M., DEMİRCİ M., YABANOVA İ.
Iğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.10, no.3, pp.1628-1639, 2020 (TRDizin)

XV. **Performing Speed Control of a DC Motor with Auto-Tuning PID**
ÇINAR S. M., BALCI Z., YABANOVA İ.
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.19, no.3, pp.690-696, 2019 (TRDizin)

XVI. **Kaynak değeri olan yaban hayvanlarının görüntü işleme tekniği ile tespiti ve sayımı**
YABANOVA İ., Kaya K.
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.25, no.2, pp.174-187, 2019 (TRDizin)

XVII. **Model Tabanlı Tasarım Metotları Kullanılarak Gerçek Zamanlı Bir Görüntü İşleme Sisteminin Tasarımı ve Gerçeklemesi**
Demirci M. Y., YABANOVA İ.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.22, no.4, pp.827-838, 2019 (TRDizin)

XVIII. **Classification of dynamic egg weight using support vector machine Destek vektör makineleri kullanarak dinamik yumurta ağırlıklarının sınıflandırılması**
YABANOVA İ., Yumurtaci M.
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.33, no.2, pp.403-412, 2018 (SCI-Expanded, Scopus, TRDizin)

XIX. **Sıvı Seviye Sensörlerinin İncelenmesi ve Su Seviyesi Ölçümü Uygulaması**
YUMURTACI M., YABANOVA İ.
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.18, no.1, pp.201-207, 2018 (TRDizin)

XX. **Digital Signal Processing-based Dynamic Mass Measurement System for Egg Weighing Process**
YABANOVA İ.
Measurement and Control (United Kingdom), vol.50, no.4, pp.97-102, 2017 (SCI-Expanded, Scopus)

XXI. **Dynamic Weight Estimation Application with Artificial Neural Networks**
Yumurtaci M., YABANOVA İ.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.20, no.1, pp.37-41, 2017 (ESCI, TRDizin)

XXII. **Yapay Sinir Ağları ile Dinamik Ağırlık Tahmin Uygulaması**
YUMURTACI M., YABANOVA İ.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.20, no.1, pp.37-41, 2017 (TRDizin)

XXIII. **Dynamic Mass Measurement And Appropriate Filter Analysis**
YABANOVA İ.
ISTANBUL UNIVERSITY - JOURNAL OF ELECTRICAL AND ELECTRONICS ENGINEERING, vol.16, no.2, pp.3033-3036, 2016 (Scopus, TRDizin)

XXIV. **Designing a real-time remote control system for undergraduate engineering and engineering technology students**
YABANOVA İ., TAŞKIN S., Ekiz H., Oğuz Y., Akaslan D., Yumurtaci M.
Journal of Engineering Technology, vol.33, no.1, pp.34-43, 2016 (SCI-Expanded, Scopus)

XXV. **Dinamik Ağırlık Ölçümü ve Dalgacık Dönüşümü Uygulaması**
YABANOVA İ., YUMURTACI M.
International journal of advances in engineering and pure sciences (Online), vol.28, no.1, pp.7-12, 2016 (Peer-Reviewed Journal)

XXVI. **Development of remote monitoring and control system for mechatronics engineering practice: The case of flexible manufacturing system**
YABANOVA İ., TAŞKIN S., Ekiz H.
International Journal of Electrical Engineering and Education, vol.52, no.3, pp.264-275, 2015 (SCI-Expanded, Scopus)

XXVII. **Dynamic Model Extraction for Speed Control of Induction Motor Driven by a Voltage Source Inverter with Using System Identification Application**
YUMURTACI M., YABANOVA İ., OĞUZ Y.
International Journal of Electrical Energy, vol.3, no.1, pp.19-27, 2015 (Peer-Reviewed Journal)

XXVIII. **Estimating the dynamic viscosity of vegetable oils using artificial neural networks**
Aksoy F., YABANOVA İ., Bayrakçeken H., Aksoy L.
Energy Sources, Part A: Recovery, Utilization and Environmental Effects, vol.36, no.8, pp.858-865, 2014 (SCI-Expanded, Scopus)

XXIX. **The use of artificial neural network to evaluate insulation thickness and life cycle costs: Pipe insulation application**
Kayfeci M., YABANOVA İ., Keçebaş A.
Applied Thermal Engineering, vol.63, no.1, pp.370-378, 2014 (SCI-Expanded, Scopus)

XXX. **Economic analysis of exergy efficiency based control strategy for geothermal district heating system**
Keçebaş A., YABANOVA İ.
Energy Conversion and Management, vol.73, pp.1-9, 2013 (SCI-Expanded, Scopus)

XXXI. **Energetic and economic evaluations of geothermal district heating systems by using ANN**
Keçebaş A., Alkan M. A., YABANOVA İ., Yumurtaci M.
Energy Policy, vol.56, pp.558-567, 2013 (SCI-Expanded, SSCI, Scopus)

XXXII. **Development of ANN model for geothermal district heating system and a novel PID-based control strategy**
YABANOVA İ., Keçebaş A.
Applied Thermal Engineering, vol.51, no.1-2, pp.908-916, 2013 (SCI-Expanded, Scopus)

XXXIII. **Artificial neural network modeling of geothermal district heating system thought exergy analysis**
Keçebaş A., YABANOVA İ., Yumurtaci M.
Energy Conversion and Management, vol.64, pp.206-212, 2012 (SCI-Expanded, Scopus)

XXXIV. **Efficiency Analysis of Isolated Wind Photovoltaic Hybrid Power System With Battery Storage for Laboratory General Illumination for Education Purposes**
OĞUZ Y., OĞUZ H. H., YABANOVA İ., oğuz e., KIRKBAŞ A.
INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH, vol.2, no.3, pp.440-445, 2012 (Scopus)

XXXV. **Thermal monitoring and optimization of geothermal district heating systems using artificial neural network: A case study**
Keçebaş A., YABANOVA İ.
Energy and Buildings, vol.50, pp.339-346, 2012 (SCI-Expanded, Scopus)

XXXVI. **Adaptive neuro-fuzzy inference system to improve the power quality of a split shaft microturbine power generation system**
Oguz Y., Ustun S. V., YABANOVA İ., Yumurtaci M., GÜNEY K. R. İ.
JOURNAL OF POWER SOURCES, vol.197, pp.196-209, 2012 (SCI-Expanded, Scopus)

XXXVII. **Development of PID and fuzzy logic controller simulator for control systems education**
YABANOVA İ., Yumurtaci M., Kecebas A.
Energy Education Science and Technology Part B: Social and Educational Studies, vol.4, no.1, pp.67-76, 2012 (Scopus)

XXXVIII. **Estimation of dynamic viscosities of vegetable oils using artificial neural networks**
Aksoy F., YABANOVA İ., Bayrakceken H.
INDIAN JOURNAL OF CHEMICAL TECHNOLOGY, vol.18, no.3, pp.227-233, 2011 (SCI-Expanded, Scopus)

XXXIX. **Denetleyici Alan Ağı Üzerinden Mekatronik Bir Sistemin Kontrolü**
YABANOVA İ., TAŞKIN S., EKİZ H., ÇİMEN H.
Makine Teknolojileri Elektronik Dergisi (elektronik), vol.7, no.2, pp.63-72, 2010 (TRDizin)

XL. **Eğitim Amaçlı Esnek ve Modüler Üretim Sistemlerinin Teknik Eğitimde Kullanılması**
ÇİMEN H., TAŞKIN S., YABANOVA İ.
Makine Teknolojileri Elektronik Dergisi, vol.4, no.3, pp.43-53, 2007 (TRDizin)

Books

I. **General Illumination with Power Led Fed y Solar Panels and Calculation of Illumination**
OĞUZ Y., YUMURTACI M., YABANOVA İ.
in: Solar Radiation Protection Management and Measurement Techniques, Fatih Onur Hocaoglu, Editor, Nova Science Publishers, pp.107-118, 2012

Papers Presented at Peer-Reviewed Scientific Conferences

I. **Simulation of Relay Coordination by Labview and the Effect of Relay Coordination on Cost**
ÇİMEN H., Akkan R., YABANOVA İ.
THE 5TH INTERNATIONAL CONFERENCE ON ELECTRICAL ENGINEERING, CONTROL AND ROBOTICS (EECR 2019), Guangzhou, China, 12 - 14 January 2019, vol.533, pp.1-8, (Full Text)

II. **Classification of Dynamic Egg Weight Using Artificial Neural Network**
ÇİMEN H., YABANOVA İ.
2018 7TH INTERNATIONAL CONFERENCE ON COMPUTERS COMMUNICATIONS AND CONTROL (ICCCC 2018), Oradea, Romania, 8 - 12 May 2018, (Full Text)

III. **Dinamik Ağırlık Ölçümü ve Adaptif Filtre Uygulaması**
YABANOVA İ., Yanık M.
2nd International Conference on Engeneering Technology and Applied Sciences, Baia-Mare, Romania, 20 - 21 April 2017, pp.23-28, (Full Text)

IV. **MODELLING OF PERFORMANCE AND EXHAUST EMISSIONS OF GASOLINE ENGINE FUELLED METHANE HYDROGEN USING SVR MODEL**

ÇELİK C., Açıkgöz B., SOYHAN H. S., YABANOVA İ., DEMİRTAŞ V., YUMURTACI M.
International Conference on Sustainable Energy Environmental Protection, Kayseri, Turkey, 22 - 24 September 2016, (Full Text)

V. **Matlab Simulink Blokları ve Arduino DUE Kartı Kullanılarak Aydınlık Seviyesinin PID Kontrolör ile Ayarlanması**
KIRKBAŞ A., ERGİN S., KOCAMAN Ç., YABANOVA İ., VARBAK NEŞE S., YUMURTACI M.
I. INTERNATIONAL WORKSHOP ON CONSTRUCTION AND ELECTRICITY APPLICATIONS ON VOCATIONAL EDUCATION (IWCEA 2015), 30 November - 01 December 2015, (Full Text)

VI. **Automatic control systems simulators for control systems laboratory**
YUMURTACI M., KIRKBAŞ A., OĞUZ Y., YABANOVA İ.
2nd WORLD CONFERENCE ON INFORMATION TECHNOLOGY, Antalya, Turkey, 22 - 27 November 2011, vol.1, pp.946-951, (Full Text)

VII. **Bootloader design application for embedded systems by using controller area network**
YABANOVA İ., TAŞKIN S., EKİZ H., ÇİMEN H.
2. World Conference On Informatıon Technology, WCIT-2011, 22 - 24 November 2011, pp.66, (Summary Text)

VIII. **Dağıtık Sistem Tasarımının Mekatronik Bir Sistem Üzerinde Uygulaması**
YABANOVA İ., TAŞKIN S., EKİZ H.
6th International Advanced Technologies Symposium (IATS'11), 16 - 18 May 2011, (Full Text)

IX. **Energy Efficiency in Natural Stone Cutting Process**
ÇİMEN H., ÇINAR S. M., NARTKAYA M., YABANOVA İ.
2008 IEEE Energy 2030 Conference, Atlanta, GA, USA, 17 - 18 November 2008, (Full Text)

X. **Web Based Remote Access Microcontroller Laboratory**
ÇİMEN H., YABANOVA İ., NARTKAYA M., ÇINAR S. M.
WORLD CONGRESS ON SCIENCE, ENGINEERING AND TECHNOLOGY 2008, 29 - 31 October 2008, vol.34, pp.192-195, (Full Text)

XI. **A SCADA program for automated storage and retrieval systems**
ÇİMEN H., YABANOVA İ.
37th International Conference on Computers and Industrial Engineering, Alexandria, Canada, 20 - 23 October 2007, vol.1, pp.360-364, (Full Text)

XII. **A new microcontroller experiment set for undergraduate students**
ÇİMEN H., NARTKAYA M., YABANOVA İ., ÇINAR S. M.
4thInternational Forum on Engineering Education-Integrating Teaching&Reseach with Community Service, 25 - 27 April 2006, (Full Text)

Funded Projects

BAŞARAN K., GÖREL G., YILMAZ B. M., YABANOVA İ., ARIKUŞU Y. S., Project Supported by Higher Education Institutions, BAP Infrastructure, Akıllı Şebeke Sistemlerinde Yenilenebilir Enerji Entegrasyonu, Gerçek Zamanlı Kontrol ve İletişim Teknolojilerinin Geliştirilmesi, 2025 - 2026

YABANOVA İ., BAŞARAN K., UYSAL A., ÖZÇEVİK Y., Project Supported by Higher Education Institutions, BAP Infrastructure, Gömülü Sistem Eğitiminde Simülasyon ve Uygulamalı Eğitimin Öğrenci Başarıları Üzerine Etkisinin Araştırılması, 2024 - 2025

YABANOVA İ., Project Supported by Higher Education Institutions, Çip Üzerinde Sistem Yapılarının İncelenmesi ve Gömülü Sistem Uygulamalarının Geliştirilmesi, 2017 - 2017

YABANOVA İ., Industrial Thesis Project, Hareket Halindeki Ürünler İçin Elektronik Tartım Sistemi Tasarımı, 2015 - 2016

YABANOVA İ., Project Supported by Higher Education Institutions, LABORATUAR ORTAMINDA YARİİLETKEN KONTROLLÜ KOMPANZASYON SİSTEMİ İLE GÜÇ FAKTÖRÜNÜN DÜZELTİLMESİ VE GERİLİM KARARLILIĞI, 2012 - 2015

YABANOVA İ., TUBITAK Project, Otomatik Yumurta Dizgi Makinesi Tasarım ve imalatı, 2012 - 2012

YABANOVA İ., Project Supported by Higher Education Institutions, DSP Tabanlı Sürücü Kullanarak Elektrik Motorları için Kontrol Yazılımı Geliştirme, 2011 - 2015

YABANOVA İ., Project Supported by Higher Education Institutions, Esnek Üretim Sisteminin Mekatronik Mikrokontrolör Eğitimine Hazırlanması, 2009 - 2011
YABANOVA İ., Project Supported by Higher Education Institutions, Laboratuvar Ölçekli Güç Sistem Modelinin Deneysel Kurulumu, 2008 - 2009
YABANOVA İ., TUBITAK Project, ST Mermer Kesme Makinelerinde Elektrik Enerjisi Tüketimi Optimizasyonu, 2007 - 2009
YABANOVA İ., Project Supported by Higher Education Institutions, İnternet Tabanlı Programlanır Sistemler Laboratuvarı, 2006 - 2008

Peer Reviews in Scientific Publications

Other journals, January 2017

Metrics

Publication: 53
Citation (WoS): 308
Citation (Scopus): 353
H-Index (WoS): 9
H-Index (Scopus): 9