

# Prof. HÜSEYİN METİN ERTUNÇ

## Personal Information

Fax Phone: [+90 262 303 3003](tel:+902623033003)

Office Phone: [+90 262 303 3217](tel:+902623033217)

Email: hmertunc@kocaeli.edu.tr

Other Email: hmertunc@gmail.com

Web: <https://mekatronik.kocaeli.edu.tr>

Address: Kocaeli Üniversitesi Mekatronik Mühendisliği Bölümü Umuttepe Kampüsü, İzmit,  
KOCAELİ, 41001



## International Researcher IDs

ScholarID: AZ-r6RsAAAAJ

ORCID: 0000-0003-1874-3104

Publons / Web Of Science ResearcherID: F-4877-2018

ScopusID: 9636710200

Yoksis Researcher ID: 24426

## Education Information

Doctorate, Case Western Reserve University, Engineering, Electrical Engineering And Computer Science, United States Of America 1995 - 1999

Postgraduate, Case Western Reserve University, Engineering, Systems, Control And Industrial Engineering, United States Of America 1994 - 1995

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1986 - 1991

## Biography

H. Metin Ertunc received the B.S. degree from electrical and electronics engineering department at Hacettepe University in 1991 in Ankara, Turkey. He obtained his MS degree from Systems and Control Engineering Department and PhD. Degree from electrical engineering and computer science department at Case Western Reserve University, Cleveland, OH, USA, in 1995 and 1999, respectively. Currently, Dr. Ertunc is a professor at Mechatronics Engineering Department at Kocaeli University. His research interests include automatic control and monitoring systems, fault detection based on signal processing techniques, artificial neural networks.

## Dissertations

Doctorate, Techniques for Tool Wear Condition Monitoring in Drilling Operations, Case Western Reserve University, Electrical Engineering And Computer Science, 1999

## Research Areas

Information Systems, Communication and Control Engineering, Control and System Engineering, Control Systems and Instrumentation, Robotics and Mechatronics Systems, Mechatronic Systems, Signal Processing, Signal Processing Theory

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

## Academic Titles / Tasks

Professor, Kocaeli University, Mühendislik Fakültesi, Mekatronik Mühendisliği, 2014 - Continues

Associate Professor, Kocaeli University, Mühendislik Fakültesi, Mekatronik Mühendisliği, 2008 - 2011

Assistant Professor, Kocaeli University, Mühendislik Fakültesi, Mekatronik Mühendisliği, 2001 - 2008

Assistant Professor, Kocaeli University, Teknik Eğitim Fakültesi, Elektronik ve Bilgisayar Eğitimi, 1999 - 2001

## Academic and Administrative Experience

Fakülte Yönetim Kurulu Üyesi, Kocaeli University, Mühendislik Fakültesi, Mekatronik Mühendisliği, 2019 - Continues

Fakülte Kurulu Üyesi, Kocaeli University, Mühendislik Fakültesi, Mekatronik Mühendisliği, 2016 - 2019

Kocaeli Üniversitesi, Mühendislik Fakültesi, 2015 - 2016

Enstitü Yönetim Kurulu Üyesi, Kocaeli University, Fen Bilimleri Enstitüsü, Makatronik Mühendisliği Bölümü, 2014 - 2015

Kocaeli Üniversitesi, Mühendislik Fakültesi, Mekatronik Mühendisliği Bölümü, 2013 - 2015

Fakülte Kurulu Üyesi, Kocaeli University, Mühendislik Fakültesi, Mekatronik Mühendisliği, 2010 - 2013

## Courses

SİSTEM DİNAMİĞİ, Undergraduate, 2017 - 2018, 2016 - 2017

INTRODUCTION TO FUZZY LOGIC, Undergraduate, 2017 - 2018, 2016 - 2017

MEKATRONİK SİSTEMLERİN TASARIMI, Postgraduate, 2017 - 2018, 2016 - 2017

SENSOR TEHNİQUES, Undergraduate, 2016 - 2017

OTOMATİK KONTROL, Undergraduate, 2016 - 2017

## Jury Memberships

Doctorate, Doctorate, Yıldız Teknik Üniversitesi, March, 2024

Doctorate, Doctorate, Dokuz Eylül Üniversitesi, March, 2024

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

### I. Classification of CNC Vibration Speeds by Heralick Features

Kuncan M., Kaplan K., Kaya Y., Minaz M. R., Ertunç H. M.

Journal of Universal Computer Science, vol.30, no.3, pp.363-382, 2024 (SCI-Expanded)

### II. Enhancing aerial robots performance through robust hybrid control and metaheuristic optimization of controller parameters

Alqudsi Y. S., Saleh R. A. A., MAKARACI M., ERTUNÇ H. M.

Neural Computing and Applications, vol.36, no.1, pp.413-424, 2024 (SCI-Expanded)

### III. End-to-end tire defect detection model based on transfer learning techniques

Saleh R. A. A., KONYAR M. Z., KAPLAN K., ERTUNÇ H. M.

Neural Computing and Applications, 2024 (SCI-Expanded)

### IV. Classification of the brain metastases based on a new 3D deep learning architecture

Cuşkun Y., Kaplan K., Alparslan B., Ertunç H. M.

Soft Computing, vol.27, no.22, pp.17243-17256, 2023 (SCI-Expanded)

### V. <p>Investigation of a heat storage system consisting of basalt stones, water and a phase change

**material</p>**

Ucler K., Kibar A., Ertunç H. M., Yiğit K. S.

JOURNAL OF ENERGY STORAGE, vol.50, 2022 (SCI-Expanded)

- VI. **A new automatic bearing fault size diagnosis using time-frequency images of CWT and deep transfer learning methods**

Kaya Y., Kuncan F., ERTUNÇ H. M.

Turkish Journal of Electrical Engineering and Computer Sciences, vol.30, no.5, pp.1851-1867, 2022 (SCI-Expanded)

- VII. **A new feature extraction approach based on one dimensional gray level co-occurrence matrices for bearing fault classification**

Kaya Y., Kuncan M., Kaplan K., Minaz M. R., Ertunç H. M.

JOURNAL OF EXPERIMENTAL & THEORETICAL ARTIFICIAL INTELLIGENCE, vol.33, no.1, pp.161-178, 2021 (SCI-Expanded)

- VIII. **Classification of bearing vibration speeds under 1D-LBP based on eight local directional filters**

KAYA Y., KUNCAN M., KAPLAN K., MİNNAZ M. R., ERTUNÇ H. M.

SOFT COMPUTING, vol.24, no.16, pp.12175-12186, 2020 (SCI-Expanded)

- IX. **Brain tumor classification using modified local binary patterns (LBP) feature extraction methods**

KAPLAN K., KAYA Y., KUNCAN M., ERTUNÇ H. M.

MEDICAL HYPOTHESES, vol.139, 2020 (SCI-Expanded)

- X. **A novel feature extraction method for bearing fault classification with one dimensional ternary patterns**

KUNCAN M., KAPLAN K., MİNNAZ M. R., KAYA Y., ERTUNÇ H. M.

ISA TRANSACTIONS, vol.100, pp.346-357, 2020 (SCI-Expanded)

- XI. **An improved feature extraction method using texture analysis with LBP for bearing fault diagnosis**

KAPLAN K., KAYA Y., KUNCAN M., MİNNAZ M. R., ERTUNÇ H. M.

APPLIED SOFT COMPUTING, vol.87, 2020 (SCI-Expanded)

- XII. **Design, production and novel NC tool path generation of CNC tire mold processing machine**

Kuncan M., KAPLAN K., ERTUNÇ H. M., KÜÇÜKATEŞ S.

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.33, no.3, pp.1183-1199, 2018 (SCI-Expanded)

- XIII. **Olive separation machine based on image processing**

KUNCAN M., ERTUNÇ H. M.

MECHANIKA, no.5, pp.438-443, 2016 (SCI-Expanded)

- XIV. **A development of electromagnetic retarder controller to stabilise vehicle speed by using PWM technique**

ERGÜN R. E., UÇAR M., ERTUNÇ H. M., CENGİZ A.

INTERNATIONAL JOURNAL OF HEAVY VEHICLE SYSTEMS, vol.21, no.2, pp.169-181, 2014 (SCI-Expanded)

- XV. **Prediction of fetal state from the cardiotocogram recordings using adaptive neuro-fuzzy inference systems**

OCAK H., ERTUNÇ H. M.

NEURAL COMPUTING & APPLICATIONS, vol.23, no.6, pp.1583-1589, 2013 (SCI-Expanded)

- XVI. **ANFIS modelling of the performance and emissions of a diesel engine using diesel fuel and biodiesel blends**

HOŞÖZ M., ERTUNÇ H. M., Karabektaş M., Ergen G.

APPLIED THERMAL ENGINEERING, vol.60, pp.24-32, 2013 (SCI-Expanded)

- XVII. **ANN- and ANFIS-based multi-staged decision algorithm for the detection and diagnosis of bearing faults**

ERTUNÇ H. M., OCAK H., ALIUSTAOGLU C.

NEURAL COMPUTING & APPLICATIONS, vol.22, 2013 (SCI-Expanded)

- XVIII. **MODELLING OF AN AUTOMOTIVE AIR CONDITIONING SYSTEM USING ANFIS**

HOŞÖZ M., ALKAN A., ERTUNÇ H. M.

ISI BİLİMI VE TEKNİĞİ DERGİSİ-JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, vol.33, no.1, pp.127-137,

- 2013 (SCI-Expanded)
- XIX. **A support vector machine-based online tool condition monitoring for milling using sensor fusion and a genetic algorithm**  
KAYA B., OYSU C., ERTUNÇ H. M., OCAK H.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART B-JOURNAL OF ENGINEERING MANUFACTURE, vol.226, pp.1808-1818, 2012 (SCI-Expanded)
- XX. **An adaptive neuro-fuzzy inference system model for predicting the performance of a refrigeration system with a cooling tower**  
HOŞÖZ M., ERTUNÇ H. M., BULGURCU H.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.38, no.11, pp.14148-14155, 2011 (SCI-Expanded)
- XXI. **Force-torque based on-line tool wear estimation system for CNC milling of Inconel 718 using neural networks**  
KAYA B., OYSU C., ERTUNÇ H. M.  
ADVANCES IN ENGINEERING SOFTWARE, vol.42, no.3, pp.76-84, 2011 (SCI-Expanded)
- XXII. **Performance prediction of a CI engine using artificial neural network for various SME and diesel fuel blends**  
GÖKALP B., ERTUNÇ H. M., HOŞÖZ M., SARAÇ H. İ.  
INTERNATIONAL JOURNAL OF VEHICLE DESIGN, vol.54, no.2, pp.156-176, 2010 (SCI-Expanded)
- XXIII. **Decomposition of forced turbulent jet flows**  
ERDİL A., ERTUNÇ H. M., YILMAZ T.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART C-JOURNAL OF MECHANICAL ENGINEERING SCIENCE, vol.223, no.4, pp.919-933, 2009 (SCI-Expanded)
- XXIV. **Tool wear condition monitoring using a sensor fusion model based on fuzzy inference system**  
ALIUSTAOGLU C., ERTUNÇ H. M., OCAK H.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, vol.23, no.2, pp.539-546, 2009 (SCI-Expanded)
- XXV. **Comparative analysis of an evaporative condenser using artificial neural network and adaptive neuro-fuzzy inference system**  
ERTUNÇ H. M., HOŞÖZ M.  
INTERNATIONAL JOURNAL OF REFRIGERATION-REVUE INTERNATIONALE DU FROID, vol.31, no.8, pp.1426-1436, 2008 (SCI-Expanded)
- XXVI. **Modelling of a direct evaporative air cooler using artificial neural network**  
HOŞÖZ M., ERTUNÇ H. M., Ozguc A. F.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.32, no.1, pp.83-89, 2008 (SCI-Expanded)
- XXVII. **Performance prediction of a cooling tower using artificial neural network**  
Hosoz M., Ertunc H. M., BULGURCU H.  
ENERGY CONVERSION AND MANAGEMENT, vol.48, no.4, pp.1349-1359, 2007 (SCI-Expanded)
- XXVIII. **Performance and exhaust emissions of a gasoline engine using artificial neural network**  
SAYIN C., Ertunc H. M., Hosoz M., KILIÇASLAN I., Canakci M.  
APPLIED THERMAL ENGINEERING, vol.27, no.1, pp.46-54, 2007 (SCI-Expanded)
- XXIX. **The prediction of mechanical behavior for steel wires and cord materials using neural networks**  
Yilmaz M., Ertunc H. M.  
MATERIALS & DESIGN, vol.28, no.2, pp.599-608, 2007 (SCI-Expanded)
- XXX. **An artificial neural network model for toughness properties in microalloyed steel in consideration of industrial production conditions**  
Col M., Ertunc H. M., Yilmaz M.  
MATERIALS & DESIGN, vol.28, no.2, pp.488-495, 2007 (SCI-Expanded)
- XXXI. **Prediction of the pool boiling critical heat flux using artificial neural network**  
Ertunc H. M.  
IEEE TRANSACTIONS ON COMPONENTS AND PACKAGING TECHNOLOGIES, vol.29, no.4, pp.770-777, 2006 (SCI-Expanded)
- XXXII. **Modelling of a cascade refrigeration system using artificial neural network**

- Hosoz M., Ertunc H. M.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.30, no.14, pp.1200-1215, 2006 (SCI-Expanded)
- XXXIII. Prediction of the air temperature and humidity at the outlet of a cooling coil using neural networks**  
Yigit K. S., Ertunc H. M.  
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.33, no.7, pp.898-907, 2006 (SCI-Expanded)
- XXXIV. Artificial neural network analysis of an automobile air conditioning system**  
Hosoz M., Ertunc H. M.  
ENERGY CONVERSION AND MANAGEMENT, vol.47, pp.1574-1587, 2006 (SCI-Expanded)
- XXXV. Artificial neural network analysis of a refrigeration system with an evaporative condenser**  
Ertunc H. M., Hosoz M.  
APPLIED THERMAL ENGINEERING, vol.26, pp.627-635, 2006 (SCI-Expanded)
- XXXVI. Using adaline neural network for performance improvement of smart antennas in TDD wireless communications**  
Kavak A., Yigit H., Ertunc H. M.  
IEEE TRANSACTIONS ON NEURAL NETWORKS, vol.16, no.6, pp.1616-1625, 2005 (SCI-Expanded)
- XXXVII. Drill wear monitoring using cutting force signals**  
Ertunc H. M., Oysu C.  
MECHATRONICS, vol.14, no.5, pp.533-548, 2004 (SCI-Expanded)
- XXXVIII. Autoregressive and neural network model based predictions for downlink beamforming**  
YİĞİT H., Kavak A., Ertunc M.  
ADVANCES IN NEURAL NETWORKS - ISNN 2004, PT 2, vol.3174, pp.254-261, 2004 (SCI-Expanded)
- XXXIX. A decision fusion algorithm for tool wear condition monitoring in drilling**  
Ertunc H. M., Loparo K.  
International Journal of Machine Tools and Manufacture, vol.41, no.9, pp.1347-1362, 2001 (SCI-Expanded)
- XL. Tool Wear Condition Monitoring in Drilling Operations using Hidden Markov Models**  
ERTUNÇ H. M., LOPARO K., OCAK H.  
International Journal Of Machine Tools, vol.41, pp.1347-1362, 2001 (SCI-Expanded)

## Articles Published in Other Journals

- I. Explainable attention-based fused convolutional neural network (XAFCNN) for tire defect detection: an industrial case study  
Saleh R. A. A., ERTUNÇ H. M.  
ENGINEERING RESEARCH EXPRESS, vol.6, no.1, 2024 (ESCI)
- II. Natural Navigation System Design for Indoor Mobile Robots  
ADEBAYO A. F., ERTUNÇ H. M.  
Kocaeli Journal of Science and Engineering, vol.5, no.1, pp.73-83, 2022 (Peer-Reviewed Journal)
- III. Development of a Neural Network Model for Recognizing Red Palm Weevil Insects Based on Image Processing  
Saleh R. A. A., ERTUNÇ H. M.  
Kocaeli Journal of Science and Engineering, vol.5, no.1, pp.1-4, 2022 (Peer-Reviewed Journal)
- IV. Top ve Plaka Sisteminin PID ve Bulanık Mantık Algoritmaları ile Gerçek Zamanda Konum ve Yörünge Kontrolü  
Baylan A. T., Açıkmese M. E., Bayagut S., Dalgıç U., ERTUNÇ H. M.  
Fırat Üniversitesi Uzay ve Savunma Teknolojileri Dergisi, vol.1, no.1, pp.61-67, 2022 (Peer-Reviewed Journal)
- V. Turkish handwriting recognition system using multi-layer perceptron  
KUNCAN M., Vardar E., KAPLAN K., ERTUNÇ H. M.  
Journal of Mechatronics and Artificial Intelligence in Engineering, vol.1, no.2, pp.41-52, 2020 (Peer-Reviewed Journal)

- VI. **PID ve Bulanık Mantık Tabanlı DC Motorun Gerçek Zamanlı Konum Kontrolü**  
KAPLAN K., KUNCAN M., Polat H., Tepe B., ERTUNÇ H. M.  
İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.10, no.2, pp.900-916, 2020 (Peer-Reviewed Journal)
- VII. **MEMS Fabrication using P $\mu$ SL Technique Based 3D Printer**  
ERTUĞRUL İ., AKKUŞ N., AYGÜL E., YALÇINKAYA S., ERTUNÇ H. M.  
International Journal of 3D Printing Technologies and Digital Industry, vol.4, no.1, pp.38-43, 2020 (Peer-Reviewed Journal)
- VIII. **A Combined Decision Algorithm for Diagnosing Bearing Faults Using Artificial Intelligent Techniques**  
ERTUNÇ H. M.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BİLİMLERİ DERGİSİ, vol.36, pp.1233-1251, 2018 (Peer-Reviewed Journal)
- IX. **Ball and Beam Control based on NARMA L-2 Controller**  
Vardar E., KAPLAN K., ERTUNÇ H. M.  
Kocaeli Üniversitesi Fen Bilimleri Dergisi, vol.1, no.2, pp.77-83, 2018 (Peer-Reviewed Journal)
- X. **Design of an Automatic Coil Lath Bonding Machine For Distribution Transformers**  
BİÇİL H., POLAT T., KUNDAKÇI İ. M., AYAZ M., ERTUNÇ H. M.  
The Eurasia Proceedings of Science, Technology, Engineering Mathematics, vol.1, pp.116-122, 2017 (Peer-Reviewed Journal)
- XI. **Handwriting Character Recognition by using Fuzzy Logic**  
ENES V., KAPLAN K., ERTUNÇ H. M.  
Turkish Journal of Science Technology TJST, vol.12, no.2, pp.71-77, 2017 (Peer-Reviewed Journal)
- XII. **5 AXIS CNC PRECISION TIRE SIDE MACHINING**  
KUNCAN M., KAPLAN K., ERTUNÇ H. M., Küçükateş S.  
European Journal of Technique, vol.6, no.2, pp.117-123, 2016 (Peer-Reviewed Journal)
- XIII. **Process Control Methods Application in Training Set**  
KAPLAN K., KUNDAKCI İ. M., KUNCAN M., Toprak E., İzgür A., ERTUNÇ H. M.  
International Journal of Natural and Engineering Sciences, vol.10, no.1, pp.42-46, 2016 (Peer-Reviewed Journal)
- XIV. **Fuzzy Logic Based Ball on Plate Balancing System Real Time Control by Image Processing**  
KUNCAN M., KAPLAN K., Acar F., KUNDAKCI İ. M., ERTUNÇ H. M.  
International Journal of Natural and Engineering Sciences, vol.10, no.1, pp.14-18, 2016 (Peer-Reviewed Journal)
- XV. **5 Eksen CNC Hassas Lastik Yanak İşleme**  
KUNCAN M., KAPLAN K., ERTUNÇ H. M., KÜÇÜKATEŞ S.  
European Journal of Technic, vol.6, pp.117-123, 2016 (Peer-Reviewed Journal)
- XVI. **Yapay Sinir Ağları Kullanılarak Karbonat Kayalarındaki Dokunun Tanımlanmasına Bir Örnek Akveren Formasyonu**  
Çakır Ş., Ertunç H. M., Ocak H.  
Uygulamalı Yer Bilimleri Dergisi, vol.8, no.2, pp.71-79, 2009 (Peer-Reviewed Journal)
- XVII. **Tool Wear Monitoring System Using Artificial Neural Network**  
sönmez m., KANDİLLİ İ., ERTUNÇ H. M.  
Journal of Naval Science and Engineering, vol.1, no.2, pp.9-18, 2003 (Peer-Reviewed Journal)
- XVIII. **Kesici Takımların Gözlemlenmesi Üzerine Yapılan Çalışmalar**  
ERTUNÇ H. M., SEVİM İ.  
Pamukkale Üniversitesi Mühendislik Fakültesi Mühendislik Bilimleri Dergisi, vol.7, pp.55-63, 2001 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **10th International Conference on Image Processing Wavelet and Applications (IWW2019), 18-20 October 2019**  
Dökmen F. (Editor), Duru N. (Editor), Ocak H. (Editor), Ertunç H. M. (Editor), Yazıcı C. (Editor)

## Refereed Congress / Symposium Publications in Proceedings

- I. **A Development of Imaging System for Thermal Isolation in the Electric Vehicle Battery Systems**  
Güvenç İ. H., ERTUNÇ H. M.  
12th International Symposium on Intelligent Manufacturing and Service Systems, IMSS 2023, İstanbul, Turkey, 26 - 28 May 2023, pp.312-319
- II. **A Development of Electrified Monorail System (EMS) for an Automobile Production Line**  
Güvenç İ. H., ERTUNÇ H. M.  
12th International Symposium on Intelligent Manufacturing and Service Systems, IMSS 2023, İstanbul, Turkey, 26 - 28 May 2023, pp.479-486
- III. **Bir Otomobil Hattı İçin Elektromekanik Liftli Konveyör (Lift&Roller) Sisteminin Geliştirilmesi**  
Güngör R., Güvenç İ. H., Kesmen B., Ertunç H. M.  
International Symposium On Automotive Science and Technology , Ankara, Turkey, 7 - 08 October 2023, pp.410-418
- IV. **Artificial Intelligence Framework for Skin Lesion Prediction Using Medical Dermoscopic Images**  
Abualkebash H., Saleh R. A. A., Ertunç H. M., Addo D., Talo M., Al-Antari M. A.  
7th International Symposium on Multidisciplinary Studies and Innovative Technologies, ISMSIT 2023, Ankara, Turkey, 26 - 28 October 2023
- V. **Hybrid Gripper and Fixtureless Production: Design and Manufacturing Review Hibrit Gripper ve Fikstürsiz Üretime: Tasarım ve İmalat İncelemesi**  
Guvenc I. H., Arslan A. B., Kesmen B., ERTUNÇ H. M.  
2023 Innovations in Intelligent Systems and Applications Conference, ASYU 2023, Sivas, Turkey, 11 - 13 October 2023
- VI. **Kaynak Prosesleri için Robotik 3D Kaynak Dikiş Eksenini ve Formunu Tespit Eden Bir Sistem Geliştirilmesi**  
Bayraktar E. K., Sezer T., ERTUNÇ H. M.  
9. Uluslararası Marmara Fen Bilimleri Kongresi, IMASCON 2022 GÜZ, Kocaeli, Turkey, 09 December 2022, pp.151-154
- VII. **PD Kontrol ile İki Tekerlek Üzerinde Dengede Duran Robot Tasarımı**  
Özak U. C., ERTUNÇ H. M.  
9. Uluslararası Marmara Fen Bilimleri Kongresi, IMASCON 2022 GÜZ, Kocaeli, Turkey, 09 December 2022, pp.338-344
- VIII. **Elektrikli Araçlarda Batarya Hücrelerinde Kullanılan Termal Mastik Hatlarının Şekilsel Boyutlarının İncelenmesi**  
Demirörs N., ERTUNÇ H. M.  
9. Uluslararası Marmara Fen Bilimleri Kongresi, IMASCON 2022 GÜZ, Kocaeli, Turkey, 09 December 2022, pp.143-150
- IX. **Sürü Robotiği ve Sürü Algoritmaları Üzerine Bir İnceleme**  
KÖSE F., ERTUNÇ H. M.  
9. Uluslararası Marmara Fen Bilimleri Kongresi, IMASCON 2022 GÜZ, Kocaeli, Turkey, 09 December 2022, pp.314-319
- X. **Tire Defect Detection Model Using Machine Learning**  
Saleh R. A. A., KONYAR M. Z., KAPLAN K., ERTUNÇ H. M.  
2022 2nd International Conference on Emerging Smart Technologies and Applications (eSmarTA), Ibb, Yemen, 25 October 2022
- XI. **Development An Image Processing Algorithm To Detect Perforated and Non-Perforated Objects**  
KÖSE F., ERTUNÇ H. M.  
10th International Symposium on Innovative Technologies in Engineering and Science, Bursa, Turkey, 21 October

- 2022, vol.5, pp.16-25
- XII. **Dört Bacaklı Robotun Gerçek Zamanlı PID Kontrolü**  
Güvenç İ. H., ERTUNÇ H. M.  
10th International Symposium on Innovative Technologies in Engineering and Science, Bursa, Turkey, 21 October 2022
- XIII. **Detection of Air Bubbles from Tire Shearography Images**  
Saleh N. A., Konyar M. Z., Kaplan K., Ongır S., Ertunç H. M.  
4th International Congress on Human-Computer Interaction, Optimization and Robotic Applications, HORA 2022, Ankara, Turkey, 9 - 11 June 2022
- XIV. **Endüstri 4.0 Uyumlu Bir Otomatik Depolama ve Boşaltma Sisteminde Bir Raf Yükleme Algoritmasının Geliştirilmesi**  
Demirörs N., Terzi R., Bostancı T. B., ERTUNÇ H. M.  
VII. INSAC International Congress on Natural and Engineering Sciences, Konya, Turkey, 21 October 2021, pp.19-30
- XV. **An Anomaly Detection Study for Rolling Bearings**  
KUNDAKCI İ. M., KAPLAN K., Mollaköy A., Örs Ö., Müstak O., ERTUNÇ H. M.  
9th International Advanced Technologies Symposium, IATS'21, Elazığ, Turkey, 27 October 2021, pp.295-301
- XVI. **Mri Brain Tumor Classification Using Deep Learning Network Alexnet And VGG**  
Nedhal Abdo Qaid N., KAPLAN K., ERTUNÇ H. M.  
9th International Advanced Technologies Symposium, IATS'21, Elazığ, Turkey, 27 October 2021, pp.302-308
- XVII. **Type of Geometry Parameters in Tire Uniformity**  
ÖNGİR S., ERTUNÇ H. M.  
10th International Automotive Technologies Congress, OTEKON 2020, Bursa, Turkey, 06 September 2021, pp.1418-1422
- XVIII. **ESA ve Kon-DVM Modelleri Kullanarak Beyaz Kan Hücrelerinin Sınıflandırılması**  
Ekiz A., KAPLAN K., ERTUNÇ H. M.  
29.IEEE Sinyal İşleme ve İletişim Uygulamaları Kurultayı, İstanbul, Turkey, 09 June 2021, pp.1-4
- XIX. **RULMAN TİTREŞİM VERİLERİNDEN ANOMALİ TESPİTİ**  
KUNDAKCI İ. M., OCAK H., ERTUNÇ H. M.  
International Marmara Sciences Congress (Imascon 2020 – Autumn), Kocaeli, Turkey, 04 December 2020, pp.2-3
- XX. **ARAÇLARDA KULLANILAN LASTİK BASINÇ DEĞERİNİN, LASTİK KALİTE PARAMETRELERİNE VE LASTİK ÖMRÜNE ETKİLERİNİN İNCELENMESİ**  
ÖNGİR S., ERTUNÇ H. M.  
International Marmara Sciences Congress (Imascon 2020 – Autumn), Kocaeli, Turkey, 04 December 2020, pp.309-314
- XXI. **MRI BRAIN TUMOR CLASSIFICATION USING TEXTURE FEATURES AND ARTIFICIAL NEURAL NETWORK**  
QAID N. N. A., KAPLAN K., ERTUNÇ H. M.  
International Marmara Sciences Congress (Imascon 2020 – Autumn), Kocaeli, Turkey, 4 - 05 December 2020, pp.382-386
- XXII. **PID VE KAYMA KİPLİ KONTROL YÖNTEMLERİ İLE GERÇEK ZAMANDA DC MOTOR HIZ KONTROLÜ**  
KÖSE F., KİZİR S., ERTUNÇ H. M.  
International Marmara Sciences Congress (Imascon 2020 – Autumn), Kocaeli, Turkey, 04 December 2020, pp.451-456
- XXIII. **Farklı Ebatlardaki Kutular için Endüstri 4.0 Uyumlu Bir Otomatik Depolama ve Boşaltma Sistem (ODBS) Tasarımı**  
Koyun U., Özsoy D., ERTUNÇ H. M.  
8. Uluslararası Mühendislik ve Bilim Alanında Yenilikçi Teknolojiler Sempozyumu, Bursa, Turkey, 23 - 25 October 2020, pp.362-370
- XXIV. **Can We Predict Brain Metastases Primary Site by Using Deep Learning Algorithms, Even in Small Datasets?**  
ALPARSLAN B., çuşkun y., KAPLAN K., ÇALIŞKAN F., tavas o., DERVİŞOĞLU E., ERTUNÇ H. M., SİVRİOĞLU A. K.

- XXV. **Form Ölçüm Cihazı Problemlerinin Primer Ölçümlerde Kullanılması için Elektronik Ünitelerin İncelenmesi ve Kalibrasyonları**  
Demirbağ H., Kayadelen C., Yandayan T., Ganoğlu O., Aksulu M., ERTUNÇ H. M., AKKUŞ N.  
Ölçümbilim Sempozyumu ve Sergisi, Turkey, 20 - 22 November 2019, pp.451-459
- XXVI. **WAVELET DECOMPOSITION BASED FEATURE EXTRACTION OF BRAIN MR IMAGES**  
KAPLAN K., Yasin C., ERTUNÇ H. M.  
The 10th International Conference on Image Processing, Wavelet and Applications (IWW2019), Kocaeli, Turkey, 19 - 20 October 2019
- XXVII. **Kinematic Analysis and Design of 3-PUU Parallel Manipulator**  
GÜNER H. E., ÖZAKYOL H., ERTUNÇ H. M.  
10th International Symposium on Intelligent Manufacturing and Service Systems, Sakarya, Turkey, 9 - 11 September 2019, pp.1412-1419
- XXVIII. **Araç Sürüs Simülatörü için 3 Serbestlik Dereceli Paralel Hareket Platformu**  
Yasin Ç., Zafer Ç., Okan Y., KAPLAN K., ERTUNÇ H. M.  
TOK'2019 Otomatik Kontrol Ulusal Toplantısı, Muğla, Turkey, 11 September 2019 - 14 September 2014, pp.331-337
- XXIX. **PID ve Bulanık Mantık ile DC Motorun Gerçek Zamanda STM32F4 Tabanlı Konum Kontrolü**  
Karadeniz S., GÜNER H. E., ERTUNÇ H. M.  
Türkiye Otomatik Kontrol Konferansı, Turkey, 11 - 14 September 2019
- XXX. **PID ve Bulanık Mantık ile DC Motorun Gerçek Zamanda STM32F407 Tabanlı Pozisyon Kontrolü**  
POLAT H., DEMİRCİ A., ERTUNÇ H. M.  
TOK'2019 Otomatik Kontrol Ulusal Toplantısı, Turkey, 11 September 2019, pp.547-555
- XXXI. **Comparison of ANN and Random Forest Algorithms for Classification of Rolling Bearing Faults**  
KUNDAKCI İ. M., KAPLAN K., ERTUNÇ H. M.  
International Engineering and Science Symposium-IESS 2019, Siirt, Turkey, 20 - 22 June 2019
- XXXII. **PID and Fuzzy Logic Based DC Motor Real-Time Position Control with STM32F407**  
KAPLAN K., Polat H., Demirci A., KUNCAN M., ERTUNÇ H. M.  
International Engineering and Science Symposium-IESS 2019, Siirt, Turkey, 20 - 22 June 2019
- XXXIII. **MEMS FABRICATION USING P $\mu$ SL TECHNIQUE BASED 3D PRINTER**  
ERTUĞRUL İ., AKKUŞ N., YÜCE H., ERTUNÇ H. M.  
4th INTERNATIONAL CONGRESS ON 3D PRINTING (ADDITIVE MANUFACTURING) TECHNOLOGIES AND DIGITAL INDUSTRY, 11 - 14 April 2019
- XXXIV. **5 UZUVLU PARALEL ROBOT MEKANİZMASININ KALİBRASYONU**  
GÜNER H. E., KUNDAKCI İ. M., GÜNEŞ U., ERTUNÇ H. M.  
IV. INES International Academic Research Congress, 30 October - 03 November 2018
- XXXV. **Real Time Position and Trajectory Control of Ball and Plate System Using Different Control Techniques**  
KÖSE F., KAPLAN K., ERTUNÇ H. M.  
6th International Conference on Control Engineering and Information Technologies, CEIT2018, 25 - 27 October 2018, pp.1400-1406
- XXXVI. **Diagnosis of Brain Tumours from Mr Images by Using Convolutional Neural Networks**  
VARDAR E., KAPLAN K., ERTUNÇ H. M.  
International Conference on Data Science and Applications, ICONDATA 2018, 4 - 07 October 2018
- XXXVII. **Gaussian Process Regression Modelling of The Performance Of An R1234yf Automobile Air Conditioning System**  
KAPLAN K., ARAL M. C., SUHERMANTO M., ERTUNÇ H. M., HOŞÖZ M.  
International Conference on Data Science and Applications, ICONDATA 2018, 4 - 07 October 2018
- XXXVIII. **Diagnosis of Parkinson's Disease using ANN and SVM Models**  
ÇUŞKUN Y., KAPLAN K., ERTUNÇ H. M.  
International Conference on Data Science and Applications, ICONDATA-2018, 4 - 07 October 2018

- XXXIX. **TUBITAK UME Küçük Açı Deflektometresinin Hassas Pozisyon Kontrolü**  
ECEVİT S., SERBEST Ö., YANDAYAN T., ERTUNÇ H. M.  
TOK 2018 Otomatik Kontrol Ulusal Toplantısı, Kayseri, Turkey, 12 - 14 September 2018, pp.117-122
- XL. **Elektronik Diferansiyel Sisteminin PD Kontrolör ile Gerçek Zamanda Konum ve Hız Kontrolü**  
SARAL H., UĞUZ O., KUNDAKCI İ. M., ERTUNÇ H. M.  
TOK2018 Otomatik Kontrol Ulusal Toplantısı, Kayseri, Turkey, 12 - 14 September 2018, pp.408-414
- XLI. **Top ve Plaka Sisteminin PID ile Gerçek Zamanda Arduino-Tabanlı Konum ve Yörüngе Kontrolü**  
KÖSE F., ERTUNÇ H. M.  
TOK 2018 Otomatik Kontrol Ulusal Toplantısı, Kayseri, Turkey, 12 - 14 September 2018, pp.100-105
- XLII. **Fuzzy Logic Controller and PID Controller Design for Aircraft Pitch Control**  
SAYAR E., ERTUNÇ H. M.  
Proceedings of the 7th European Conference on Mechanism Science, EuCoMeS 2018, Aachen, Germany, 4 - 06 September 2018, pp.53-60
- XLIII. **Diagnosis of prostate cancer using gene expression data Gen Ifadesi Verisi Kullanarak Prostat Kanseri Teshisi**  
KAPLAN K., ERTUNÇ H. M.  
26th IEEE Signal Processing and Communications Applications Conference, SIU 2018, İzmir, Turkey, 2 - 05 May 2018, pp.1-4
- XLIV. **An Accelerated Durability of a Commercial Vehicle Based on Customer Usage Profiling Method**  
TALAY M., ERTUNÇ H. M.  
OTEKON 2018, Bursa, Turkey, 7 - 08 May 2018, pp.631-641
- XLV. **Experimental Investigation of Cutting Speed on the Surface Roughness for CNC Machine,**  
KUNCAN M., KAPLAN K., ERTUNÇ H. M., KÜÇÜKATEŞ S.  
1st International Engineering and Technology Symposium, IETS'18, 3 - 05 May 2018
- XLVI. **İçten Yanmalı Pistonlu Motorlarda Piston Kolu Ağırlık Oranının Dengelemeye Etkisi**  
KÜÇÜKATEŞ S., ERTUNÇ H. M.  
3.Uluslararası Mühendislik Mimarlık ve Tasarım Kongresi, 4 - 05 May 2018, pp.134-136
- XLVII. **Diagnosis of Prostate Cancer Using Gene Expression Data**  
KAPLAN K., ERTUNÇ H. M.  
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XLVIII. **Support vector regression modeling of the performance of an R1234yf automotive air conditioning system**  
HOŞÖZ M., KAPLAN K., ARAL M. C., SUHERMANTO M., ERTUNÇ H. M.  
5th International Conference on Energy and Environment Research (ICEER), Prague, Czech Republic, 23 - 27 July 2018, vol.153, pp.309-314
- XLIX. **Classification of Bearing Fault Size by Using Support Vector Machines**  
KAPLAN K., KUNCAN M., ERTUNÇ H. M.  
International Conference on Advances and Innovations in Engineering (ICAIE2017), 10 - 12 May 2017
- L. **Design of an Automatic Coil Lath Bonding Machine for Distribution Transformer**  
BİÇİL H., POLAT T., KUNDAKÇI İ. M., AYAZ M., ERTUNÇ H. M.  
International Conference on Technology, Engineering and Science (IConTES), Antalya, Turkey, 26 - 29 October 2017, vol.1, pp.116-122
- LI. **Automation System Design For Fault Detection In Street Lighting**  
AYAZ M., ERHAN K., KUNDAKÇI İ. M., ERTUNÇ H. M.  
International Conference on Technology, Engineering and Science (IConTES), Antalya, Turkey, 26 - 29 October 2017, vol.1, pp.111-115
- LII. **Sistem Yaklaşımı ve Kontrol Mühendisliği Açısından Yaratılış Gerçeği**  
ERTUNÇ H. M.  
I.Uluslararası Bilimler İşliğinde Yaratılış Kongresi, Urfa, Turkey, 30 November - 02 December 2017
- LIII. **DESIGN OF AN AUTOMATIC COIL LATH BONDING MACHINE FOR DISTRIBUTOR TRANSFORMERS**  
Biçil H., Polat T., Kundakci İ. M., Ayaz M., Ertunç H. M.

- ICONTES 2017, Antalya, Turkey, 26 - 29 October 2017, vol.1, pp.116-122
- LIV. **ANFIS Modelling of an Automotive Air Conditioning System Using R1234yf**  
HOŞÖZ M., KAPLAN K., ARAL M. C., SUHERMANTO M., ERTUNÇ H. M.  
8th International Advanced Technologies Symposium (IATS'17), Elazığ, Turkey, 19 - 22 October 2017, pp.539-546
- LV. **Diagnosis of Bearing Faults with Signal Processing and Artificial Neural Networks**  
CEYLAN N., KAÇAR S., KAPLAN K., ERTUNÇ H. M.  
4th Conference on Computer and Experimental Science and Engineering, 4 - 08 October 2017
- LVI. **Designing of a Shooting System Using Ultrasonic Radar Sensor**  
KÖSE F., KAPLAN K., ERTUNÇ H. M.  
5th International Symposium on Innovative Technologies in Engineering and Science, Baku, Azerbaijan, 29 - 30 September 2017, pp.1613-1622
- LVII. **Artificial Neural Network Modelling of a Mobile Air Conditioning System Using Refrigerant R1234yf**  
HOŞÖZ M., KAPLAN K., SUHERMANTO M., ARAL M. C., ERTUNÇ H. M.  
5th International Symposium on Innovative Technologies in Engineering and Science (ISITES'17), Baku, Azerbaijan, 29 - 30 September 2017, pp.615-624
- LVIII. **DESIGNING A 2 D PAINTING ROBOT**  
DEDE H., GÜNER H. E., ERGÜNER K., KARATAŞ B., AKBAŞ Ö., ERTUNÇ H. M.  
International Conference on Advanced Technology Sciences, İstanbul, Turkey, 9 - 12 May 2017
- LIX. **2 DOF Vehicle Simulator, International Conference on Advances and Innovations in Engineering**  
GÜNER H. E., DEMİRCİ B., DOĞAN İ., YALÇIN S., YILDIRIM E., ERTUNÇ H. M.  
International Conference on Advances and Innovations in Engineering, Elazığ, Turkey, 10 - 12 May 2017, pp.176-179
- LX. **Handwriting character recognition by using fuzzy logic**  
Vardar E., KAPLAN K., ERTUNÇ H. M.  
International Conference on Advances and Innovations in Engineering, ICAIE-2017, Elazığ, Turkey, 10 - 12 May 2017, pp.330-334
- LXI. **Görüntü İşleme Tabanlı 4 Eksenli Çok Amaçlı Robot Mekanizması**  
ÇUŞKUN Y., DUMAN F., BASIK H., GÜN F., KAPLAN K., ERTUNÇ H. M.  
Elektrik, Elektronik ve Biyomedikal Mühendisliği Konferansı, ELECO 2016, Bursa, Turkey, 1 - 03 December 2016, pp.247-251
- LXII. **5 AXIS CNC PRECISION TIRE SIDE MACHINING**  
KUNCAN M., KAPLAN K., ERTUNÇ H. M., KÜÇÜKATEŞ S.  
International Engineering, Science and Education Conference, Diyarbakır, Turkey, 1 - 03 December 2016
- LXIII. **Fuzzy Logic Based Ball on Plate Balancing System Real Time Control by Image Processing**  
Acar F., KAPLAN K., KUNDAKCI İ. M., KUNCAN M., ERTUNÇ H. M.  
International Congress on Natural and Engineering Sciences'2016, ÜSKÜP, Macedonia, 1 - 05 September 2016, pp.25
- LXIV. **Fuzzy Logic Based Ball on Plate Balancing System Real Time Control Image Processing**  
ACAR F., KAPLAN K., KUNDAKCI İ. M., KUNCAN M., ERTUNÇ H. M.  
International Congress on Natural and Engineering Sciences, ICNES 2016, Üsküp, Macedonia, 1 - 05 September 2016
- LXV. **Process Control Methods Application in Education Set**  
TOPRAK E., İZGÜ A., ÇETİN M., BALCI İ., KAPLAN K., KUNDAKCI İ. M., KUNCAN M., ERTUNÇ H. M.  
International Congress on Natural and Engineering Sciences, ICNES 2016, Üsküp, Macedonia, 1 - 05 September 2016, pp.31
- LXVI. **Elektrikli Araçlarda Batarya Paketi Gerilim Ölçümü için Bir Sistem Tasarımı**  
KIRCI A., SEZAL F., KUNDAKCI İ. M., ERTUNÇ H. M.  
8. Otomotiv Teknolojileri Kongresi, OTEKON'16, Turkey, 23 - 24 May 2016, pp.28-32
- LXVII. **Image Processing Based Multi-Purpose 4-Axis Robot Mechanism**  
Cusku Y., Duman F., Basik H., Gun F., KAPLAN K., ERTUNÇ H. M.  
National Conference on Electrical, Electronics and Biomedical Engineering (ELECO), Bursa, Turkey, 1 - 03

- December 2016, pp.247-251
- LXVIII. **Görüntü İşleme İle 3 Eksenli Robot Mekanizması Üzerinde Nesne Ayırt Edilmesi ve Sıralanması**  
Çubukçu A., KUNCAN M., İmren M., Erol F., ERTUNÇ H. M., ÖZTÜRK S., KAPLAN K.  
Otomatik Kontrol Ulusal Toplantısı, TOK'2015, Denizli, Turkey, 10 - 12 September 2015
- LXIX. **Araç Süspansiyon Sistemi Kontrolüne PID ve Bulanık Mantık Yaklaşımları**  
Doğan H., KAPLAN K., KUNCAN M., ERTUNÇ H. M.  
Otomatik Kontrol Ulusal Toplantısı, TOK 2015, Turkey, 10 - 12 September 2015, pp.699-704
- LXX. **Uçak Yükseklik Kontrolünde PD Kontrolör ve Bulanık Mantık Kontrolör Performans Karşılaştırması**  
Karakoç H., Kenan E., Çağırın R., Subaşı A., KUNCAN M., KAPLAN K., ERTUNÇ H. M.  
Otomatik Kontrol Türk Milli Komitesi Ulusal Toplantısı, Denizli, Turkey, 10 September 2015 - 12 December 2014, pp.1020-1026
- LXXI. **Rulman Hata Boyutunun Uyarlanabilir Sinirsel Bulanık Çıkarımı**  
KAPLAN K., KUNCAN M., ERTUNÇ H. M.  
IEEE 23. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Malatya, Turkey, 16 - 19 May 2015, pp.1182-1184
- LXXII. **Zigbee Modülü Kullanılarak Ses Kontrollü Ev Otomasyonu Geliştirilmesi**  
Aykut Ç., KUNCAN M., KAPLAN K., ERTUNÇ H. M.  
IEEE 23. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Malatya, Turkey, 16 - 19 May 2015, pp.1678-1701
- LXXIII. **Fuzzy Logic Approach to Vehicle Suspension System Control in CAE Environment**  
DOĞAN H., KAPLAN K., KUNCAN M., ERTUNÇ H. M.  
3RD INTERNATIONAL SYMPOSIUM ON INNOVATIVE TECHNOLOGIES IN ENGINEERING AND SCIENCE, 3 - 05 June 2015
- LXXIV. **Design and Manufacturing of Mini CNC Vertical Machining Center for Educational Purposes and Obtaining Optimum Spindle Speed based on Machine Vibration**  
TAŞTAN Y., ERTUNÇ H. M.  
3RD INTERNATIONAL SYMPOSIUM ON INNOVATIVE TECHNOLOGIES IN ENGINEERING AND SCIENCE, 3 - 05 June 2015
- LXXV. **5 Axis CNC Tire Surface Prototype Machine**  
KUNCAN M., KAPLAN K., ERTUNÇ H. M.  
3RD INTERNATIONAL SYMPOSIUM ON INNOVATIVE TECHNOLOGIES IN ENGINEERING AND SCIENCE, 3 - 05 June 2015
- LXXVI. **Development of a Voice-Controlled Home Automation Using Zigbee Module**  
Cubukcu A., Kuncan M., KAPLAN K., ERTUNÇ H. M.  
23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.1801-1804
- LXXVII. **PREDICTION OF BEARING FAULT SIZE BY USING MODEL OF ADAPTIVE NEURO-FUZZY INFERENCE SYSTEM**  
KAPLAN K., Kuncan M., ERTUNÇ H. M.  
23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.1925-1928
- LXXVIII. **Feature Extraction of Ball Bearings in Time Space and Estimation of Fault Size with Method of ANN**  
KAPLAN K., BAYRAM S., KUNCAN M., ERTUNÇ H. M.  
Proceedings of the 16th Mechatronika 2014, 3 - 05 December 2014
- LXXIX. **Feature Extraction Of Ball Bearings İn Time Space And Estimation Of Fault Size With Method Of ANN**  
KAPLAN K., Bayram S., KUNCAN M., ERTUNÇ H. M.  
Proceedings Of The 16th Mechatronika 2014, Brno, Czech Republic, 3 - 05 December 2014, pp.295
- LXXX. **8051 MİKRODENETLEYİCİ KULLANARAK DC MOTORUNPID İLE POZİSYON KONTROLÜ**  
ERTUĞRUL İ., ÜLKİR O., KUNCAN M., ERTUNÇ H. M.  
Otomatik Kontrol Ulusal Toplantısı- TOK, Kocaeli, Turkey, 11 - 13 September 2014, pp.984-989
- LXXXI. **Güneş Panelleri için Yüksek Verimli Maksimum Güç Noktası İzleyicisi (MPPT) Tasarımı**  
Erdoğan Y., Dinçler T., KUNCAN M., ERTUNÇ H. M.  
Otomatik Kontrol Ulusal Toplantısı (TOK 2014), Turkey, 11 - 13 September 2014, pp.1055-1060

- LXXXII. **Rulman Hatalarının Dalgacık Dönüşümü Yöntemi Kullanarak Elde Edilen Katsayılarla Etkisi**  
Bayram S., KAPLAN K., KUNCAN M., ERTUNÇ H. M.  
IEEE 22. Sinyal İşleme Ve İletişim Uygulamaları Kurultayı, Trabzon, Turkey, 23 - 25 April 2014
- LXXXIII. **THE EFFECT OF BEARINGS FAULTS TO COEFFICIENTS OBTAINED BY USING WAVELET TRANSFORM**  
Bayram S., KAPLAN K., Kuncan M., ERTUNÇ H. M.  
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.991-994
- LXXXIV. **Görüntü İşleme Tabanlı Zeytin Ayıklama Makinesi**  
KUNCAN M., ERTUNÇ H. M., KÜÇÜKYILDIZ G., HIZARCI B., OCAK H., ÖZTÜRK S.  
Otomatik Kontrol Ulusal Toplantısı (TOK 2013), Turkey, 26 - 28 September 2013, pp.459-464
- LXXXV. **Bilyeli Rulmanlarda Zaman Uzayında İstatistiksel Öznitelik Çıkarımı ve Yapay Sinir Ağları Metodu ile Hata Boyutunun Kestirimi**  
Bayram S., KAPLAN K., KUNCAN M., ERTUNÇ H. M.  
Otomatik Kontrol Ulusal Toplantısı (TOK 2013), Turkey, 26 - 28 September 2013, pp.986-991
- LXXXVI. **3 EKSENLİ MINİ CNC FREZE TEZGÂHI TASARIMI VE İMALATI**  
Demir M., KUNCAN M., ERTUNÇ H. M.  
Otomatik Kontrol Ulusal Toplantısı (TOK 2013), Turkey, 26 - 28 September 2013, pp.1231-1235
- LXXXVII. **Özel Şifreli, Telefon Uyarımlı ve Android Uygulamalı Araç Güvenlik Sistemi**  
Ağyol E., KUNCAN M., ERTUNÇ H. M.  
8.Mekatronik Tasarım ve Modelleme Kongresi- MDM2013, Turkey, 20 September 2013, pp.11-20
- LXXXVIII. **KAMERA YARDIMI İLE AYIRT EDİLEN VE TANIMLANAN CISİMLERİN 3 EKSENLİ ROBOT MEKANİZMASI İLE TAŞINMASI**  
Horoz E., Öten H. F., KUNCAN M., ERTUNÇ H. M.  
Otomatik Kontrol Ulusal Toplantısı (TOK 2013), Turkey, 26 - 28 September 2013, pp.1236-1240
- LXXXIX. **Pid Ve Bulanık Mantık İle Dc Motorun Gerçek Zamanda Stm32f407 Tabanlı Hız Kontrol**  
Köse F., KAPLAN K., ERTUNÇ H. M.  
Otomatik Kontrol Türk Milli Komitesi Ulusal Toplantısı, Malatya, Turkey, 26 - 28 September 2013
- XC. **Bilyeli Rulmanlarda Zaman Uzayında İstatistiksel Öznitelik Çıkarımı Ve Yapay Sinir Ağları Metodu ile Hata Boyutunun Kestirimi**  
Bayram S., KAPLAN K., KUNCAN M., ERTUNÇ H. M.  
Otomatik Kontrol Türk Milli Komitesi Ulusal Toplantısı, Malatya, Turkey, 26 - 28 September 2013
- XCI. **F28335 DSP ile Doğru Akım Motorunun Durum Geri Beslemeli Hız ve Konum Denetimi**  
YOLAÇAN E., AYDIN S., ERTUNÇ H. M.  
Otomatik Kontrol Ulusal Toplantısı, Turkey, 26 - 28 September 2013
- XCII. **Development of Rope Climbing Robot with Caterpillar**  
KÖSE F., KUNCAN M., ERTUNÇ H. M.  
Proceedings of 18th International Conference. Mechanika 2013, 4 - 05 April 2013
- XCIII. **Image Processing Based an Olive Separation Machine**  
KUNCAN M., ERTUNÇ H. M., KÜÇÜKYILDIZ G., OCAK H., ÖZTÜRK S.  
Proceedings of 18th International Conference. Mechanika 2013, 4 - 05 April 2013
- XCIV. **A DSPIC Based Real Time Position Control of a DC Motor Using PID and Fuzzy Logic Controller**  
TAŞÇI G., KÜÇÜKYILDIZ G., ERTUNÇ H. M., OCAK H.  
Proceedings of the 18th International Conference, Mechanika 2013, 4 - 05 April 2013
- XCV. **Image Processing Based Olive Separation Machine**  
KUNCAN M., ERTUNÇ H. M., KÜÇÜKYILDIZ G., OCAK H., ÖZTÜRK S.  
18th International Conference Mechanika 2013, 4 - 05 April 2013, pp.142-145
- XCVI. **Image Processing Based an Olive Separation Machine**  
Kuncan M., ERTUNÇ H. M., Kucukyildiz G., OCAK H., Ozturk S.  
18th International Conference on Mechanika, Kaunas, Lithuania, 4 - 05 April 2013, pp.142-145
- XCVII. **3 eksenli robot mekanizmasına monte edilmiş bir kamera vasıtasyyla farklı rotasyon ve boyutlardaki geometrik cisimlerin tanımlanarak vakum tutucu ile ayrılması**

- Bakır A., GÜNEY Ö. F., KUNCAN M., ERTUNÇ H. M.  
Otomatik Kontrol Ulusal Toplantısı (TOK 2012), Turkey, 11 - 13 October 2012, pp.606-609
- XCVIII. **Farklı Rulman Hatalarından Elde Edilen Titreşim Sinyalleri Üzerindeki Radyal Yüklerin Etkisi**  
KAPLAN K., Bayram S., KUNCAN M., ERTUNÇ H. M.  
Otomatik Kontrol Türk Milli Komitesi Ulusal Toplantısı, Niğde, Turkey, 11 - 13 October 2012
- XCIX. **Control of Single Phase UPS Inverter Using Fuzzy Gain Scheduling of PI Controller**  
BOLAT E., ERTUNÇ H. M.  
7th International Conference on Electrical and Electronics Engineering, ELECO2011, 1 - 04 December 2011
- C. **Real Time DSP Based PID and State Feedback Control of a Brushed DC Motor**  
YOLAÇAN E., AYDIN S., ERTUNÇ H. M.  
International Symposium on Information, Communication and Automation Technologies, ICAT2011, 27 - 29 October 2011
- CI. **Vibration Analysis Based Localized Bearing Fault Diagnosis Under Different Load Conditions**  
ERTUNÇ H. M., OCAK H., MERDOĞLU M., BAYRAM S., ÇAVUŞ M.  
Proceedings of 12th International Workshop on Research and Education in Mechatronics, 15 - 16 September 2011
- CII. **PID and state feedback control of a single-link flexible joint robot manipulator**  
Akyüz İ. H., Ertunç H. M., Bingül Z.  
2011 IEEE International Conference on Mechatronics, ICM 2011, İstanbul, Turkey, 13 - 15 April 2011, pp.409-414
- CIII. **Determining bearing faults using wavelet and approximate entropy Dalgacık ve yaklaşık entropi analizi ile rulman hatalarının belirlenmesi**  
Aliustaoglu C., ERTUNÇ H. M., OCAK H.  
2008 IEEE 16th Signal Processing, Communication and Applications Conference, SIU, Aydin, Turkey, 20 - 22 April 2008
- CIV. **Online Fault Detection of Roller Element Bearings Applied On a Fuzzy Inference System**  
ALIUSTAOGLU C., ERTUNÇ H. M., OCAK H.  
6th International Symposium on Intelligent and Manufacturing Systems Features, 14 - 16 October 2008
- CV. **Online Monitoring of Tool Wear and Drilling an Milling Operation with Vibration using Artificial Neural Network**  
KANDİLLİ İ., SÖNMEZ M., ERTUNÇ H. M.  
PROCEEDINGS OF THE 7TH INTERNATIONAL CONFERENCE VIBROENGINEERING 2008, Kaunas, Lithuania, 9 - 11 October 2008, pp.63-67
- CVI. **Diagnosis of Sectional Bearing Faults Using Vibration Analysis**  
ALIUSTAOGLU C., ERTUNÇ H. M., OCAK H.  
9th International Workshop on Research and Education in Mechatronics, 18 - 19 September 2008
- CVII. **Diagnosis of Sectional Faults using Vibration Analysis**  
Aliustaoglu C., ERTUNÇ H. M., OCAK H.  
9th International Workshop on Research and Education in Mechatronics, REM2008, 18 - 19 September 2008
- CVIII. **Applied Real Time Bearing Fault Diagnosis Based On Vibration and Current Analysis**  
ALIUSTAOGLU C., ERTUNÇ H. M., OCAK H.  
Proceedings of The 2008 International Conference on Artificial Intelligence, 14 - 17 July 2008
- CIX. **Determining Bearing Faults Using Wavelet and Approximate Entropy**  
Aliustaoglu C., ERTUNÇ H. M., OCAK H.  
IEEE 16th Signal Processing and Communications Applications Conference, Aydin, Turkey, 20 - 22 April 2008, pp.400-403
- CX. **Bulanık Mantık Hız Denetimli Doğru Akım Motor Sürücü Sistemi ve Karşılaştırmalı Analizi**  
KARABACAK M., SEZEN S., ERTUNÇ H. M.  
UMES 2007, Kocaeli, Turkey, 20 - 22 June 2007, vol.1, pp.187-193
- CXI. **Online monitoring of tool wear in drilling and milling by multi-sensor neural network fusion**  
KANDİLLİ İ., Soenmez M., Ertunc H. M., Cakur B.  
IEEE International Conference on Mechatronics and Automation, Harbin, China, 5 - 08 August 2007, pp.1388-1391
- CXII. **Online tracking of bearing wear using wavelet packet transform and hidden Markov models Dalgacık**

- paket dönüşümü ve saklı Markov modellen kullanarak rulman arızalarının çevrimiçi izlenmesi**  
OCAK H., ERTUNÇ H. M., Loparo K. A.  
2006 IEEE 14th Signal Processing and Communications Applications, Antalya, Turkey, 17 - 19 April 2006, vol.2006
- CXIII. Mikro Kontrolör Tabanlı PID Kontrol Sistemi Eğitim Seti**  
KİZİR S., ERTUNÇ H. M.  
TOK2006, Turkey, 01 September 2006
- CXIV. İkili ve Renkli Logo ile Sayısal Damgalama**  
KİZİR S., ERTUNÇ H. M., OCAK H.  
ELECO2006, Turkey, 01 September 2006
- CXV. Comparison of Inverse Kinematics Solutions Using Neural Network for 6R Robot Manipulator with Offset**  
Bingül Z., Ertunç H. M., Oysu C.  
5th International Symposium on Intelligent Manufacturing Systems, Sakarya, Turkey, 29 - 31 May 2006
- CXVI. Online tracking of bearing wear using wavelet packet transform and hidden Markov models**  
OCAK H., ERTUNÇ H. M., Loparo K. A.  
IEEE 14th Signal Processing and Communications Applications, Antalya, Turkey, 16 - 19 April 2006, pp.137-138
- CXVII. Bubble Driven Microjet**  
YİĞİT K. S., ERTUNÇ H. M., ARİK M., YAKUT M.  
4th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, 19 - 22 September 2005
- CXVIII. Otomobil Güvenlik Sistemi İçin Mekatronik Bir Uygulama**  
TÜRKCAN A., ERTUNÇ H. M.  
1. Uluslararası Mesleki ve Teknik Eğitim Teknolojileri Kongresi, İstanbul, Turkey, 5 - 07 September 2005
- CXIX. Applying Neural Network to Inverse Kinematic Problem for 6R Robot Manipulator with Offset Wrist**  
Bingül Z., Ertunç H. M., Oysu C.  
7th International Conference on Adaptive and Natural Computing Algorithms, Coimbra, Portugal, 21 - 23 March 2005, pp.112-115
- CXX. Fuzzy logic speed control of a DC motor**  
AYDEMİR S., SEZEN S., ERTUNÇ H. M.  
Conference Proceedings - IPEMC 2004: 4th International Power Electronics and Motion Control Conference, Xian, China, 14 - 16 August 2004, vol.2, pp.766-771
- CXXI. Autoregressive and Adaline Network Modeling for Wireless Communications**  
YİĞİT H., KAVAK A., ERTUNÇ H. M.  
International Conference on Signals and Electronic Systems (ICSES 2004), Poznan, Poland, 13 - 15 September 2004, pp.127-130
- CXXII. Design and Implementation of a Mechatronics Systems Control Card PICLABOARD**  
ÇELİKTEPE A., OYSU C., ERTUNÇ H. M.  
The 9th Mechatronics Forum International Conference, 30 August - 01 September 2004
- CXXIII. Fuzzy logic speed control of a DC motor**  
AYDEMİR S., SEZEN S., ERTUNÇ H. M.  
IEEE Power Electronics Motion Control Conference (IPEMC 2004), Xi'xxan, China, 14 - 16 August 2004, vol.2, pp.766-771
- CXXIV. The Improvement of Ride Comfort in an Automobile using Control Law based on Previous Sprung Mass Acceleration**  
KÖYLÜ H., ERTUNÇ H. M.  
5th International Workshop on Research and Education in Mechatronics, REM2004, 5 - 07 July 2004, pp.295-299
- CXXV. Using Autoregressive and Adaline Neural Network Modeling to Improve Dowlink Performance of Smart Antennas**  
YİĞİT H., KAVAK A., ERTUNÇ H. M.  
Proceedings of the IEEE International Conference on Mechatronics, 3 - 05 June 2004
- CXXVI. The Decomposition of Turbulent Flows in a Forced Jet**  
ERDİL A., ERTUNÇ H. M., YILMAZ T.

Proceedings of the IEEE International Conference on Mechatronics, 3 - 05 June 2004

- CXXVII. **Using Autoregressive and Adaline Neural Network Modeling to Improve Downlink Performance of Smart Antennas**  
YİĞİT H., KAVAK A., ERTUNÇ H. M.  
IEEE International Conference on Mechatronics (ICM 2004), İstanbul, Turkey, 3 - 05 June 2004, pp.165-170
- CXXVIII. **Kesici Takım Aşınma Durumunun Yapay Sinir Ağları Kullanılarak Belirlenmesi**  
Sönmez M., ERTUNÇ H. M., KARAKUZU C.  
ELECO'2002 Elektrik-Elektronik-Bilgisayar Mühendisliği Sempozyumu, Bursa, Turkey, 18 - 22 December 2002, vol.2, pp.197-201
- CXXIX. **Ölü-zaman Gecikmeli Sistemlerin Kontrolü için Yeni Bir YÜöntem**  
YILMAZ G., ERTUNÇ H. M.  
TOK-2002 Otomatik Kontrol Ulusal Toplantısı \_ODTÜ, Turkey, 9 - 11 September 2002
- CXXX. **A New Method for Control of Dynamic Systems With Dead-Time**  
YILMAZ G., ERTUNÇ H. M.  
4. GAP Mühendislik Kongresi, 6 - 08 June 2002
- CXXXI. **Decomposition of Turbulent Velocity Signals using Moving Average Filter**  
ERDİL A., ERTUNÇ H. M., KANDİLLİ İ., AYDIN K.  
Second International Conference on Electrical and Electronics Engineering, ELECO2001, Bursa, Turkey, 7 - 11 November 2001, vol.1, pp.241-245
- CXXXII. **Tool Wear Monitoring in Drilling Operations Using Bargraphic Methods**  
ERTUNÇ H. M., OYSU C.  
th International Conference on Mechatronic Design and Modeling, 13 - 14 September 2001
- CXXXIII. **Real Time Monitoring of Tool Wear Using Multiple Modeling Method**  
ERTUNÇ H. M., LOPARO K. A., ÖZDEMİR E., OCAK H.  
IEEE International Electric Machines and Drives Conference IEMDC 2001, 17 - 20 June 2001
- CXXXIV. **The Design and Implementation of Rain Sensitive Triggering System for Windshield Wiper Motor**  
UÇAR M., ERTUNÇ H. M., TURKOĞLU Ö.  
IEEE International Electric Machines and Drives Conference IEMDC 2001, 17 - 20 June 2001

## Supported Projects

ERTUNÇ H. M., Bayraktar E. K., TUBITAK Project, MIG&MAG ve Lazer Kaynak Prosesleri için Robotik 3D Kaynak Dikiş Eksenini ve Formunu Tespit Eden Bir Sistem Geliştirilmesi, 2023 - 2024

KONYAR M. Z., ERTUNÇ H. M., KAPLAN K., ÖNGİR S., Project Supported by Higher Education Institutions, Şerografik Görüntüler Kullanılarak Yarış Lastiklerinin Katmanları Arasındaki Hava Kabarcıklarını Tespit Yazılımının Geliştirilmesi, 2022 - 2023

Konyar M. Z., Ertunç H. M., Kaplan K., TUBITAK Project, 2021 - 2023

ERTUNÇ H. M., Kablancı B., TUBITAK Project, Otomotiv İmalat Sektöründe Kullanılan Otomatik Depolama ve Boşaltma Sistemleri için Dijital Dönüşüm Kapsamında İleri ve Esnek Robotik Otomasyon Sistemi Geliştirilmesi, 2021 - 2022

ERTUNÇ H. M., GÜNER H. E., Project Supported by Higher Education Institutions, ROBOTİK KODLAMA UYGULAMALARI, 2019 - 2021

ERTUNÇ H. M., Project Supported by Higher Education Institutions, MİKRO DİZİ VERİLERİNDEN DERİN ÖĞRENME METOTLARI İLE HASTALIK TEŞHİSİ, 2018 - 2019

ERTUNÇ H. M., TUBITAK Project, GÖRÜNTÜ İŞLEME TABANLI 3 EKSENLİ ÇOK AMAÇLI ROBOT UYGULAMASI, 2016 - 2017

ERTUNÇ H. M., Project Supported by Higher Education Institutions, Tübitak Alternatif Enerjili Araç Yarışları için Elektrikli Otomobil Tasarımı ve Üretilimi, 2015 - 2017

OCAK H., KİZİR S., ERTUNÇ H. M., TUBITAK Project, İç Mekanlarda Otonom Bir Şekilde Hareket Edebilen Bir Mobil Robotun Tasarım İmalat Ve Kontrolü, 2014 - 2016

ERTUNÇ H. M., Industrial Thesis Project, 5 EKSEN CNC LASTİK KALIBİ DESEN MAKİNESİNİN TASARIMI VE İMALATI,

2013 - 2016

ERTUNC H. M., Project Supported by Higher Education Institutions, GENEL AMAÇLI OTOMASYON SİSTEM TASRIMI, 2014 - 2015

ERTUNC H. M., Project Supported by Higher Education Institutions, Farklı renklerdeki zeytinleri görüntü işleme tabanlı ayırt eden bir sistemin tasarımlı, 2013 - 2015

ERTUNC H. M., TUBITAK Project, Delme İşlemelerinde Kesici Takım Aşınmasını Gerçek Zamanda Gözlemleyen Bir Sistem Geliştirilmesi, 2000 - 2003

## Metrics

Publication: 200

Citation (WoS): 1587

Citation (Scopus): 2297

H-Index (WoS): 22

H-Index (Scopus): 25

## Non Academic Experience

Company, ROBO Otomasyon, Ar-Ge Birimi

TCDD Ankara Behiçbey Fabrikası