

# **Prof. ŞAHİN YILDIRIM**

## **Personal Information**

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## **International Researcher IDs**

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Publons / Web Of Science ResearcherID: A-4345-2019

ScopusID: 7006442375

Yoksis Researcher ID: 2244

## **Education Information**

Doctorate, University of Wales-University of Wales Institute, Cardiff, Engineering, Systems Engineering, United Kingdom  
1994 - 1998

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, Makina Mühendisliği, Turkey 1992 - 1993

Postgraduate, Erciyes University, Fen Bilimleri Enstitüsü, Makina Mühendisliği, Turkey 1989 - 1991

Undergraduate, Erciyes University, Mühendislik Fakültesi, Makina Müh., Turkey 1985 - 1989

## **Foreign Languages**

English, C1 Advanced

## **Certificates, Courses and Trainings**

Education Management and Planning, E-LEARNING PROJESİ AB, DEBRECEN-OREDEA UNIVERSITY, 2012

Education Management and Planning, TUSSIDE, TÜBİTAK-PROJE YÜRTÜCÜLERİ EĞİTİMİ, 2006

## **Research Areas**

Information Systems, Communication and Control Engineering, Control and System Engineering, Simulation, Modelling and Identification, Mechanical Engineering, Machine Theory and Dynamics, Vehicle Systems Dynamics, Robotics, Mechatronics, Mechanical Vibrations, Engineering and Technology

## **Academic Titles / Tasks**

Professor, Erciyes University, Mühendislik Fakültesi, Mekatronik Mühendisliği, 2009 - Continues

Associate Professor, Erciyes University, Mühendislik Fakültesi, Mekatronik Mühendisliği, 2004 - 2009

Assistant Professor, Erciyes University, Mühendislik Fakültesi, Makina Mühendisliği, 1999 - 2004

## **Academic and Administrative Experience**

Erciyes Üniversitesi, Mühendislik Fakültesi, Mekatronik Mühendisliği, 2006 - Continues  
Erciyes Üniversitesi, Mühendislik Fakültesi, 2006 - Continues  
Erciyes Üniversitesi, Mühendislik Fakültesi, Mekatronik Mühendiliği, 2006 - Continues  
Erciyes University, 2006 - Continues  
Erciyes University, 2006 - Continues  
Erciyes Üniversitesi, Erciyes Üniversitesi Rektörlüğü, 2016 - 2019  
Erciyes Üniversitesi, Havacılık ve Uzay Bilimleri Fakültesi, 2012 - 2016  
Erciyes University, 2012 - 2016  
Erciyes University, 2009 - 2015  
Erciyes Üniversitesi, Mühendislik Fakültesi, 2011 - 2014  
Erciyes Üniversitesi, Rektörlük, 2006 - 2009  
Erciyes Üniversitesi, Mühendislik Fakültesi, Makina Mühendiliği, 2003 - 2006

## **Courses**

TAŞIMA SİSTEMLERİ, Undergraduate, 2013 - 2014  
YSA MÜH.UYG., Postgraduate, 2013 - 2014  
BİLG. DESTEKLİ SİST.DİN. VE KONTROLU, Postgraduate, 2012 - 2013  
ROBOT TEKNOLOJİSİ, Undergraduate, 2012 - 2013  
MEKATRONİK MÜHENDİSLİĞİNE GİRİŞ, Undergraduate, 2010 - 2011  
MEKATRONİĞİN ESASLARI, Undergraduate, 2011 - 2012

## **Advising Theses**

YILDIRIM Ş., GÖRME ENGELLİLER İÇİN MOBİL ROBOT TSASARIMI, YÖRÜNGE PLANLAMASI VE KONTROLÜ, Doctorate, S.SAVAŞ(Student), Continues  
YILDIRIM Ş., YILANSI ROBOTUN DİNAMİK ANALİZİ VE YÖRÜNGE KONTROLÜ, Doctorate, E.YAŞAR(Student), 2017  
YILDIRIM Ş., Pnömatik Devrelerde Optimum Tasarım ve YSA ile Titreşim Analizi, Postgraduate, A.BULGAN(Student), 2013  
YILDIRIM Ş., Altı Bacaklı Yürüyen Robotun Tasarımı ve Dinamik Analizi, Postgraduate, E.ARSLAN(Student), 2011  
YILDIRIM Ş., Control of a Experimental Mobile Robot Using Adaptive Neural Control, Postgraduate, S.SAVAŞ(Student), 2010  
YILDIRIM Ş., Suspension System design and Control with Adaptive PID controller, Postgraduate, E.ESİM(Student), 2009  
YILDIRIM Ş., Kinematic Analysis of 6 DOF robot using Neural Networks, Postgraduate, M.YILDIRIM(Student), 2008  
YILDIRIM Ş., Deneysel aktif Süspasyon Sistemi ve Kontrolü, Doctorate, İ.ESKİ(Student), 2006  
YILDIRIM Ş., 3 DOF with 3 fingers design, production and intelligent control, Postgraduate, C.ŞAHİN(Student), 2002

## **Jury Memberships**

Post Graduate, TEZ SAVUNMA SINAVI, ERCİYES ÜNİVERSİTESİ, May, 2013  
Post Graduate, TEZ SAVUNMA SINAVI, ERCİYES ÜNİVERSİTESİ, March, 2013  
Doctorate, DOKTORA TEZ SAVUNMA, SELÇUK ÜNİVERSİTESİ, September, 2010  
Associate Professor Exam, Doçentlik Sınav Jürisi, ERCİYES, June, 2009

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

- I. Trajectory Analysis of 6-DOF Industrial Robot Manipulators by Using Artificial Neural Networks  
Çetinkaya M. B., Yıldırım K., Yıldırım Ş.  
SENSORS, vol.24, no.13, pp.1-25, 2024 (SCI-Expanded)

- II. Vibration analysis and control of aircraft landing systems using proposed neural controllers**  
**YILDIRIM Ş., DURMUŞOĞLU A.**  
 Neural Computing and Applications, vol.36, no.21, pp.13255-13268, 2024 (SCI-Expanded)
- III. Tuning the Proportional–Integral–Derivative Control Parameters of Unmanned Aerial Vehicles Using Artificial Neural Networks for Point-to-Point Trajectory Approach**  
**Ulu B., Savaş S., Ergin Ö. F., Ulu B., Kirnap A., Bingöl M. S., Yıldırım Ş.**  
 SENSORS, vol.24, pp.1-19, 2024 (SCI-Expanded)
- IV. Deep Learning Based Apples Counting for Yield Forecast Using Proposed Flying Robotic System**  
**Yıldırım Ş., Ulu B.**  
 SENSORS, vol.23, no.13, pp.1-14, 2023 (SCI-Expanded)
- V. Experimentally flight performances comparison of octocopter, decacopter and dodecacopter using universal UAV**  
**YILDIRIM Ş., Çabuk N., BAKIRCIOĞLU V.**  
 Measurement: Journal of the International Measurement Confederation, vol.213, 2023 (SCI-Expanded)
- VI. VIBRATION ANALYSES OF RAILWAY SYSTEMS USING PROPOSED NEURAL PREDICTORS**  
**YILDIRIM Ş., Sevim Ç., Kalkat M.**  
 Neural Network World, vol.33, no.3, pp.143-159, 2023 (SCI-Expanded)
- VII. DESIGN OF NEURAL PREDICTORS FOR PREDICTING AND ANALYSING COVID-19 CASES IN DIFFERENT REGIONS**  
**Yıldırım Ş., Durmusoglu A., Sevim Ç., Bingol M. S., Kalkat M.**  
 NEURAL NETWORK WORLD, vol.32, no.5, pp.233-251, 2023 (SCI-Expanded)
- VIII. <p>Experimental comparison of the effect of the number of redundant rotors on the fault tolerance performance for the proposed multilayer UAV &nbsp;</p>**  
**Bakircioglu V., ÇABUK N., YILDIRIM Ş.**  
 ROBOTICS AND AUTONOMOUS SYSTEMS, vol.149, 2022 (SCI-Expanded)
- IX. Investigation of dynamic response of multi- carriages double bridge overhead type crane system subjected to the moving load**  
**Yıldırım Ş., Eşim E.**  
 JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, vol.44, no.3, 2022 (SCI-Expanded)
- X. Vibration analysis of an experimental double bridge crane system with artificial neural networks**  
**Yıldırım Ş., Eşim E.**  
 JVC/Journal of Vibration and Control, vol.27, no.23-24, pp.2724-2737, 2021 (SCI-Expanded)
- XI. Design and trajectory control of universal drone system**  
**YILDIRIM Ş., Cabuk N., Bakircioglu V.**  
 MEASUREMENT, vol.147, 2019 (SCI-Expanded)
- XII. ODE (Open Dynamics Engine) based stability control algorithm for six legged robot**  
**YILDIRIM Ş., ARSLAN E.**  
 MEASUREMENT, vol.124, pp.367-377, 2018 (SCI-Expanded)

## Articles Published in Other Journals

- I. DESIGN OF A PROPOSED NEURAL NETWORK FOR SOUND QUALITY ANALYSIS OF DIFFERENT TYPES FOR CAR SYSTEMS**  
**YILDIRIM Ş., BİNGÖL M. S.**  
 International Journal of Mechatronics and Applied Mechanics, vol.2024, no.16, pp.76-81, 2024 (Scopus)
- II. OPTIMAL PID CONTROLLER DESIGN FOR TRAJECTORY TRACKING OF A DODECAROTOR UAV BASED ON GREY WOLF OPTIMIZER**  
**YILDIRIM Ş., ÇABUK N., BAKIRCIOĞLU V.**  
 Konya mühendislik bilimleri dergisi (Online), vol.11, no.1, pp.10-20, 2023 (Peer-Reviewed Journal)

- III. **Performance analysis of multi rotor drone systems with changeable rotors**  
YILDIRIM Ş., İşci M.  
International Review of Applied Sciences and Engineering, vol.14, no.1, pp.45-57, 2023 (Scopus)
- IV. **DESIGN OF INTELLIGENT CRUISE CONTROLLER OF MOTOR VEHICLES**  
YILDIRIM Ş., BİNGÖL M. S., SAVAŞ S.  
International Journal of Mechatronics and Applied Mechanics, vol.2023, no.13, pp.193-197, 2023 (Scopus)
- V. **NEURAL PREDICTOR DESIGN FOR COVID-19 CASES IN DIFFERENT REGIONS**  
YILDIRIM Ş., Durmusoglu A., Sevim C., BİNGÖL M. S., Kalkat M.  
International Journal of Mechatronics and Applied Mechanics, vol.2023, no.14, pp.14-18, 2023 (Scopus)
- VI. **Dört Rotorlu Uçan Robotik Sistem Üzerinden Sinir Ağrı Kullanılarak Nesne Tespit Edilmesi**  
Yıldırım Ş., Ulu B.  
Fırat Üniversitesi Uzay ve Savunma Teknolojileri dergisi, vol.1, no.1, pp.133-136, 2022 (Peer-Reviewed Journal)
- VII. **Design, Modelling and Control of an Eight-Rotors UAV with Asymmetric Configuration for Use in Remote Sensing Systems**  
ÇABUK N., YILDIRIM Ş.  
JOURNAL OF AVIATION, 2021 (Peer-Reviewed Journal)
- VIII. **Design of a mobile robot to work in hospitals and trajectory planning using proposed neural networks predictors**  
YILDIRIM Ş., SAVAŞ S.  
International Journal of Mechatronics and Applied Mechanics, vol.1, no.9, pp.159-167, 2021 (Scopus)
- IX. **Classification of Mushroom Data Set by Ensemble Methods**  
YILDIRIM Ş., BİNGÖL M. S.  
Recent Innovations in Mechatronics, vol.7, no.1, 2020 (Peer-Reviewed Journal)
- X. **Angular Position Control of 3-Cars Crane System Using Proposed Fuzzy-PID Controller**  
YILDIRIM Ş., GÖRDEBİL A.  
Recent Innovations in Mechatronics, vol.7, no.1, 2020 (Peer-Reviewed Journal)
- XI. **Trajectory Control of Designed Experimental Mobile Robot**  
YILDIRIM Ş., EREN B.  
Recent Innovations in Mechatronics, vol.7, no.1, 2020 (Peer-Reviewed Journal)
- XII. **Altı Rotorlu ve Sekiz Rotorlu İnsansız Hava Araçlarının Farklı Bozucu Etki Altında Uçuş Performanslarının Karşılaştırılması**  
YILDIRIM Ş., ÇABUK N., BAKIRCIOĞLU V.  
Konya Journal of Engineering Sciences, vol.8, no.3, pp.552-562, 2020 (Peer-Reviewed Journal)
- XIII. **Modelling and Control of Proposed Two Dodecacopter Systems**  
YILDIRIM Ş., ÇABUK N., BAKIRCIOĞLU V.  
International Journal of Applied Mathematics Electronics and Computers, 2020 (Peer-Reviewed Journal)
- XIV. **Control of air flow temperature and pressure inthe pipelines with PID**  
YILDIRIM Ş., GÖÇER A.  
International Review of Applied Sciences and Engineering, vol.11, no.2, pp.167-173, 2020 (Scopus)
- XV. **Modal Analysis of Double Beam Overhead Type Crane Systems by Finite Element Method**  
Yıldırım Ş., Esim E.  
Konya Mühendislik Bilimleri Dergisi, vol.7, no.0, pp.975-988, 2019 (Peer-Reviewed Journal)
- XVI. **A Comparison of Six Legged ODE (Open Dynamics Engine) Based Gait control Algorithm and Standard Walking Gaits**  
YILDIRIM Ş., ARSLAN E.  
Avrupa Bilim ve Teknoloji Dergisi, 2019 (Peer-Reviewed Journal)
- XVII. **Effects of the geometric shape and placing length of a fiber post on the stress distribution in a mandibular premolar tooth: A finite element analysis study**  
ASLAN T., ESİM E., KILIÇ K., ER Ö., YILDIRIM Ş.  
International Dental Research, vol.8, no.3, pp.105-110, 2018 (Peer-Reviewed Journal)
- XVIII. **ODE (Open Dynamics Engine) Based Walking Control Algorithm for Six Legged Robot**

- YILDIRIM Ş., ARSLAN E.  
 JOURNAL OF NEW RESULTS IN SCIENCE (JNRS), vol.7, no.2, pp.35-46, 2018 (Peer-Reviewed Journal)
- XIX. **Design of Neural Predictor for Performance Analysis of Mountain Bicycles**  
 YILDIRIM Ş., KALKAT M.  
 Recent Innovations in Mechatronics (RİM), vol.5, no.1, 2018 (Peer-Reviewed Journal)
- XX. **YAPAY SİNİR AĞLARI KULLANARAK DOKUMA MAKİNALARINDA TIĞ MEKANİZMALARININ KİNEMATİK ANALİZİ**  
 YILDIRIM Ş., SU Ş., UZMAY İ.  
 ERCİYES ÜNİVERSİTESİ FEN BİLİMLERİ ENSTİTÜSÜ DERGİSİ, vol.20, pp.13-19, 2004 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Multi-Rotors Universal Drone System**  
 Yıldırım Ş., Çabuk N.  
 in: Advanced in Engineering Research, Victoria M. Petrova, Editor, Nova Publisher, New York, pp.137-164, 2022
- II. **Parameter Tuning of ODE-based Walking Control Algorithm for a Six Legged Mobile Robot**  
 Yıldırım Ş., Arslan E.  
 in: IFToMM for Sustainable Development Goals, Giuseppe Quaglia, Alessandro Gasparetto, Victor Petuya, Giuseppe Carbone, Editor, Springer, London/Berlin , Dubendorf, pp.553-561, 2021
- III. **A Proposed Trajectory Planning Algorithm for Mobile Robot Navigation Based on A\* Algorithm**  
 Yıldırım Ş., Savaş S.  
 in: Handbook of Research on Advanced Mechatronic Systems and Intelligent Robotics, Maki K. Habib, Editor, IGI GLOBAL, Cairo, pp.361-376, 2019
- IV. **Tracking Control of a Nonholonomic Mobile Robot Using Neural Network**  
 Yıldırım Ş., Savaş S.  
 in: Handbook of Research on Advancements in Robotics and Mechatronics, Habib Maki K., Editor, IGI Global, Cairo, pp.631-661, 2015
- V. **Analysing Of Flying Conditions Of Aircrafts Using Artificial Neural Networks**  
 YILDIRIM Ş., ERKAYA S.  
 in: New Trends in Mechanism and Machine Science, Flores P. Viadero F., Editor, Springer, London/Berlin , Porto, pp.721-731, 2014
- VI. **Design of Artificial Neural Network Predictors in Mechanical Systems Problems**  
 YILDIRIM Ş., TOPAL E. S., ESKİ İ.  
 in: Design of Artificial Neural Network Predictors in Mechanical Systems Problems, Nova Publishers, Editor, Nova Publisher, Newyork, 2011

## Refereed Congress / Symposium Publications in Proceedings

- I. **Intelligent Mechatronic Systems Applications in Engineering**  
 Yıldırım Ş.  
 Advances in Design, Simulation and Manufacturing V, Poznan, Poland, 7 - 10 June 2022, pp.123-134
- II. **Investigation of the SLAM Performance of the Multirotor MAV Developed for the Analysis of Orchards**  
 YILDIRIM Ş., ULU B.  
 International Conference on Reliable Systems Engineering, ICoRSE 2022, Virtual, Online, 8 - 09 September 2022, vol.534 LNNS, pp.247-254
- III. **Examination of the Effect of Hyperparameters on Object Detection in the Orchard Using Deep Learning**  
 YILDIRIM Ş., ULU B.

- International Conference on Reliable Systems Engineering (ICoRSE) - 2023, Bucharest, Romania, 7 - 08 September 2023, vol.762 LNNS, pp.616-621
- IV. **Parameter Tuning of ODE-Based Walking Control Algorithm for a Six Legged Mobile Robot**  
YILDIRIM Ş., ARSLAN E.  
1st IFToMM for Sustainable Development Goals workshop (I4SDG), ELECTR NETWORK, 25 - 26 November 2021, vol.108, pp.553-561
- V. **Askı tip krenlerde kaldırma grubu dinamik analizi**  
YILDIRIM Ş., ESİM E.  
20. Ulusal Makina Teorisi Sempozyumu(UMTS 2021), Diyarbakır, Turkey, 15 September 2021, pp.80-89
- VI. **PARALEL ÇÖZÜMLEME DESTEKLİ YÜRÜYÜŞ SİMÜLATÖRÜ**  
Yıldırım Ş., Arslan E.  
20. ULUSAL MAKİNA TEORİSİ SEMPOZYUMU, Diyarbakır, Turkey, 15 - 17 September 2021, pp.41-49
- VII. **Design of a Mobile Robot to Work in Hospitals and Trajectory Planning Using Proposed Neural Networks Predictors**  
YILDIRIM Ş., SAVAŞ S.  
THE FIRST INTERNATIONAL CONFERENCE ON RELIABLE SYSTEMS ENGINEERING, Romania, 09 September 2021
- VIII. **Experimental Investigation of the Effect of Mass Load on Flight Performance of an Octorotor and Dodecarotor UAV**  
YILDIRIM Ş., BAKIRCIOĞLU V., ÇABUK N.  
International Conference Innovation In Engineering, Portugal, 28 June 2021
- IX. **Controller Gain Tuning of a Nonholonomic Mobile Robot via Neural Network Predictor**  
Yıldırım Ş., Savaş S., Andruskiene J.  
The 25th International Conference ELECTRONICS 2021, Kaunas, Lithuania, 14 - 16 June 2021, pp.1-6
- X. **Machine Design for Hardness Measurement of Universal Mattress**  
YILDIRIM Ş.  
4th International Symposium on Innovative Approaches Engineering and Natural Science, 22 - 24 November 2019
- XI. **Borularda Hava Akış Sıcaklık Ve Basıncının PID İle Kontrolü**  
Yıldırım Ş., Göçer A.  
19. Ulusal Makina Teorisi Sempozyumu (UMTS 2019), Hatay, Turkey, 4 - 06 September 2019, pp.19-29
- XII. **TASARLANMIŞ DENYESEL BİR MOBİL ROBOTUN YÖRÜNGE KONTROLÜ**  
YILDIRIM Ş., EREN B.  
19. ULUSAL MAKİNE TEORİSİ SEMPOZYUMU (UMTS), Hatay, Turkey, 4 - 06 September 2019, pp.189-198
- XIII. **GELİŞTİRİLEN SİNİR AĞI MODELİ İLE TESPİT EDİLEN KAYNAKYÖRÜNGESİ İÇİN İDEAL EKLEM AÇILARININ BELİRLENMESİ**  
YILDIRIM Ş., ULU B.  
19. Ulusal Makina Teorisi Sempozyumu, Turkey, 4 - 06 September 2019
- XIV. **Çift Köprülü Askı Tip Kren Sistemlerinin Sonlu Elemanlar Metodu İle Modal Analizi**  
YILDIRIM Ş., ESİM E.  
19. Ulusal Makina Teorisi Sempozyumu (UMTS 2019), Hatay, Turkey, 4 - 06 September 2019, pp.265-274
- XV. **Design and Control of a Proposed Multi-Propeller System**  
YILDIRIM Ş., ÇABUK N., BAKIRCIOĞLU V.  
8th International Conference on Advanced Technologies, 26 - 30 August 2019
- XVI. **Thermal Stress Analysis in Cylinder Head of A Spark Ignition Engine Fueled with Ethanol Gasoline Using Artificial Neural Networks**  
YILDIRIM Ş., ESKİ İ.  
8th International Conference on Advanced Technologies, 26 - 30 August 2019
- XVII. **Thermal stresses analysis in cylinder head of a spark ignition engine fueled with ethanol-gasoline using artificial neural networks**  
YILDIRIM Ş., ESKİ İ., UZUNEANU K.  
8th International Conference on Advanced Technologies, Saraybosna, Bosnia And Herzegovina, 26 - 30 August 2019, pp.39-45

- XVIII. **Performance Analysis of Pelton Turbines Using Proposed Neural Networks Predictors**  
YILDIRIM Ş., ÇİL M., BİNGÖL M. S.  
International Conference on Computational Methods in applied Sciences, 12 - 16 July 2019
- XIX. **Pnömatik devrelerde Optimum Tasarım ve YSA ile Tireşim Analizi**  
YILDIRIM Ş., BULGAN A.  
18. Ulusal Makina Teorisi Sempozyumu, Turkey, 5 - 07 July 2017
- XX. **Desing of Neural Network Based Fuzzy Inference System for Speed Control of Heavy Duty Vehicles with Electronic Throttle Control System**  
ESKİ İ., YILDIRIM Ş.  
15th International Conference on Circuits, Systems, Electronics, Control & Signal Processing, İstanbul, Turkey, 15 April - 17 June 2016, vol.1, pp.128-132
- XXI. **Fracture resistance of oval and circular dowels used in oval root canals**  
KILINÇ H. İ., ASLAN T., KILIÇ K., ER Ö., ESİM E., YILDIRIM Ş.  
39th Annual Conference of the European Prosthodontic Association, Prag, Czech Republic, 3 - 05 September 2015
- XXII. **Adaptive PID Controller for Experimental Two degrees of Freedom Suspension System**  
YILDIRIM Ş., ESİM E.  
16th Building Services, 14 - 15 October 2010, pp.551-562
- XXIII. **Bir Prototip Süspansiyon Sistemi İçin Adaptif Kontrol Organı Tasarımı**  
YILDIRIM Ş., ESİM E.  
15. Ulusal Makine Teorisi Sempozyumu, Turkey, 16 - 18 June 2011, pp.609-616
- XXIV. **A neural based position controller for an electrohydraulic servo system**  
YILDIRIM Ş., Erkaya S., UZMAY İ., Kalkat M.  
11th WSEAS International Conference on Robotics, Control and Manufacturing Technology, ROCOM'11, 11th WSEAS International Conference on Multimedia Systems and Signal Processing, MUSP'11, Venice, Italy, 8 - 10 March 2011, pp.31-38
- XXV. **Robotik İş Birimlerinin Simülasyonunda Esaslar**  
SARIKAYA H., UZMAY İ., YILDIRIM Ş.  
5.Uluslararası Makina Tasarım ve İmalat Kongresi, Ankara, Turkey, 16 - 18 September 1992

## Other Publications

- I. **Design and Dynamic Analysis of Six Legged Walking Robot**  
YILDIRIM Ş., ARSLAN E.  
Other, pp.112-117, 2012

## Supported Projects

- YILDIRIM Ş., ÇABUK N., BAKIRCIOĞLU V., Project Supported by Higher Education Institutions, Motor Sayısı Değiştirilebilir Çok Rotorlu Drone Tasarımı ve Uygulaması, 2017 - 2020
- YILDIRIM Ş., SAVAŞ S., Project Supported by Higher Education Institutions, Görme Engelliler için Mobil Robot Tasarımı, Yörünge Planlaması ve Kontrolü, 2012 - 2019
- YILDIRIM Ş., ULU B., Project Supported by Higher Education Institutions, Endüstriyel Robotlarda Kaynak Yörüngesinin Analizi ve Kontrolü, 2016 - 2017
- Ulu B., Yıldırım Ş., Project Supported by Higher Education Institutions, Endüstriyel Robotlarda Kaynak yörünge analizi ve kontrolü, 2016 - 2017
- GÜRGAN C. A., YILDIRIM Ş., ESİM E., TEMEL T., SAVAŞ S., SARI M. Y., Project Supported by Higher Education Institutions, Dişeti Morfometrik Değerlendirmelerinde Bilgisayar Destekli Standardize Dijital Fotografik Görüntüleme Yönteminin Güvenilirlik ve Tutarlılığının Değerlendirilmesi için PLC Kontrollü Tam Otomasyonlu Sistem Tasarımı ve Gerçekleştirilmesi, 2015 - 2017

YILDIRIM Ş., SU Ş., ESİM E., Project Supported by Higher Education Institutions, Aski Tip Kren Sistemlerinin Farklı

Hareket Koşullarında Deneysel olarak Dinamik Analizi Ve Salınım Kontrolü, 2015 - 2017

YILDIRIM Ş., YAŞAR E., Project Supported by Higher Education Institutions, YILAN TİPİ ROBOT TASARIMI, PROTATİPİ VE YÖRÜNGE ANALİZİ, 2014 - 2016

SU Ş., YILDIRIM Ş., KALKAT M., SEVİM Ç., Project Supported by Higher Education Institutions, Zeki Hemzemin Geçiti Tasarımı, Prototip Gerçekleştirilmesi Ve Kontrolü, 2014 - 2016

YILDIRIM Ş., ŞENEL S., KANAAN M., ERKAYA S., SAVAŞ S., YAMAÇLI S., Project Supported by Higher Education Institutions, Hastane Ortamında Hastalara Yardımcı Olacak Bir Mobil Robotun (HAYAMOR) Tasarlanması ve Gerçekleştirilmesi, 2013 - 2016

YILDIRIM Ş., ESKİ İ., POLAT Y., Project Supported by Higher Education Institutions, Yapay Sinir Ağları kullanarak, insan kalça ve diz eklemlerinin deneysel gürültü analizi, 2010 - 2012

UZMAY İ., YILDIRIM Ş., ERKAYA S., ESKİ İ., Project Supported by Higher Education Institutions, MEKATRONİK MÜHENDİSLİĞİ BÖLÜMÜ ENDÜSTRİYEL TEKNOLOJİLER ARAŞTIRMA, UGULAMA VE EĞİTİM MERKEZİ ALT YAPI PROJESİ, 2007 - 2008

YILDIRIM Ş., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, MEKATRONİK SİSTEMLER, 2005 - 2008

YILDIRIM Ş., ESKİCİ İ., Project Supported by Higher Education Institutions, YAPAY SİNİR AĞI DENETİM ORGANI

KULLANARAK, TAŞITLarda AKTİF SÜSPANSİYON SİSTEMİ VE ANTİ-BLOKAj SİSTEMİ (ABS) KONTROLÜ, 2005 - 2007

YILDIRIM Ş., Project Supported by Higher Education Institutions, YAPAY SİNİR AĞLARI KULLANARAK ESNEK İMALAT SİSTEMİ DİZAYNI VE KONTROL UYGULAMASI, 2005 - 2007

YILDIRIM Ş., Project Supported by Higher Education Institutions, YAPAY SİNİR AĞLARI KULLANARAK TAŞITLarda AKTİF SÜSPANSİYON SİSTEMİNİN KONTROLÜ, 2004 - 2006

YILDIRIM Ş., TUBITAK Project, TAŞITLarda ZEKİ AKTİF SÜSPANSİYON SİSTEMİ TASARIMI VE KONTROLÜ, 2004 - 2006

YILDIRIM Ş., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, YAPAY SİNİR AĞLARI KULLANARAK ESENek İMALAT SİSTEMİ DİZAYNI VE KONTROL EDİLMESİ, 2002 - 2005

## Activities in Scientific Journals

International Journal of Advanced Robotic Systems, Assistant Editor/Section Editor, 2012 - Continues

WSEAS Transactions on Systems, Evaluation Committee Member, 2011 - Continues

INTERNATIONAL REVIEW OF APPLIED SCIENCES AND ENGINEERING, Publication Committee Member, 2011 - Continues

INTERNATIONAL JOURNAL OF SIMULATION AND PRACTICE THEORY, Evaluation Committee Member, 2010 - Continues

Journal of Sound and Vibration, Evaluation Committee Member, 2010 - Continues

ROBOTICS AND AUTOMATION SYSTEMS, Evaluation Committee Member, 2010 - Continues

ROBOTICS-COMPUTERAIDED MANUFACTURING, Evaluation Committee Member, 2009 - Continues

13th WSEAS Int. Conf. on MATHEMATICAL and COMPUTATIONAL METHODS in SCIENCE and ENGINEERING, Evaluation Committee Member, 2009 - Continues

MECHATRONICS, Evaluation Committee Member, 2009 - Continues

Applied Mathematical Modelling, Evaluation Committee Member, 2009 - Continues

JOURNAL OF MECHANISM AND THEORY, Publication Committee Member, 2009 - Continues

JOURNAL OF SIMULATION PRACTICE AND THEORY, Evaluation Committee Member, 2009 - Continues

Journal of Engineering, Design and Technology, Evaluation Committee Member, 2009 - Continues

JOURNAL OF SOUND AND CONTROL, Evaluation Committee Member, 2009 - Continues

NONLINEAR DYNAMICS, Evaluation Committee Member, 2009 - Continues

MECHANISMS AND MACHINE THEORY, Publication Committee Member, 2009 - Continues

COMPUTING AND ELECTRONICS ENGINEERING, Evaluation Committee Member, 2007 - Continues

The Arabian Journal for Science and Engineering, Evaluation Committee Member, 2007 - Continues

IEEE ELECTRONICS, Evaluation Committee Member, 2007 - Continues

Computers and Mathematics with Applications, Evaluation Committee Member, 2007 - Continues

Journal of Mechanical Science and Technology, Evaluation Committee Member, 2007 - Continues

## **Memberships / Tasks in Scientific Organizations**

MAKİNA TEORİSİ DERNEĞİ, Member, 2013 - Continues

the 20 International Conference on Mechatronics and Machine Vision and Practice, Consultant, 2013 - Continues

MeMÖK 2014, Member, 2014 - 2014

SAE INTERNATIONAL, Member, 2010 - 2011

IEEE, Member, 2002 - 2003

## **Scientific Refereeing**

MEASUREMENT, SCI Journal, September 2018

NONLINEAR DYNAMICS, SCI Journal, August 2018

NEURAL COMPUTING AND APPLICATIONS, SCI Journal, May 2018

SHOCK AND VIBRATION, SCI Journal, February 2018

MEASUREMENT, SCI Journal, July 2017

MEASUREMENT, SCI Journal, June 2017

MEASUREMENT, SCI Journal, May 2017

Measurement, SCI Journal, April 2017

TURKISH JOURNAL OF ELECTRICAL&COMPUTER ENGINEERING, SCI Journal, October 2013

NONLINEAR DYNAMICS, SCI Journal, October 2013

JOURNAL OF CONTROL SCIENCE AND ENGINEERING, SCI Journal, August 2013

Engineering Applications of Artificial Intelligence, SCI Journal, July 2013

The Arabian Journal for Science and Engineering, SCI Journal, May 2013

INTERNATIONAL JOURNAL OF MANUFACTURING ENGINEERING, SCI Journal, April 2013

MECHATRONICS, SCI Journal, July 2011

MECHANISM AND THEORY, SCI Journal, May 2008

## **Metrics**

Publication: 246

Citation (WoS): 611

Citation (Scopus): 665

H-Index (WoS): 13

H-Index (Scopus): 15

## **Congress and Symposium Activities**

VIII. INTERNATIONAL ICONTECH CONFERENCE ON INNOVATIVE SURVEYS IN POSITIVE SCIENCES, Invited Speaker, Baku, Azerbaijan, 2024

International Conference on Reliable Systems Engineering (ICoRSE) - 2023, Invited Speaker, Bucuresti, Romania, 2023  
EEMC'17, Invited Speaker, Debrecen, Hungary, 2017

ULUSAL MAKİNA TEORİSİ SEMPOZYUMU, Attendee, İZMİR, Turkey, 2015

TET PROJE PAZARI, Attendee, Turkey, 2015

Building Services, Mechanical, and Building Industry Days Conference, Debrecen (Hungary), Invited Speaker, Hungary, 2014

TET PROJE PAZARI, Attendee, Turkey, 2014

EGE İHRACATCILARI BİRLİĞİ PROJE PAZARI, Attendee, Turks And Caicos Islands, 2013

ULUSAL MAKİNA TEORİSİ SEMPOZYUMU 13, Attendee, ERZURUM, Turkey, 2013

METALİK FİKİRLER PROJE PAZARI, Attendee, İstanbul, Turkey, 2013  
MAKİNA VE AKSALARI PROJE PAZARI, Attendee, Turkey, 2013  
PROJE PAZARI ÇALIŞTAYI, Attendee, İstanbul, Turkey, 2012  
WSEAS 2011, VENICE, Invited Speaker, Italy, 2011  
ROCOM '11, Invited Speaker, Romania, 2011  
Building Services, Mechanical, and Building Industry Days Conference, Debrecen (Hungary), Session Moderator, Hungary, 2011  
ULUSAL MAKINA TEORİSİ SEMPOZYUMU, Attendee, NİĞDE, Turkey, 2011  
IEEE AIM 2011, BUDAPEST, Invited Speaker, Hungary, 2011  
ULUSAL MAKINA TEORİSİ SEMPOZYUMU UMTS2011, NİĞDE, Invited Speaker, Turkey, 2011  
Building Services, Mechanical, and Building Industry Days Conference, Debrecen (Hungary), Session Moderator, Hungary, 2010  
Building Services, Mechanical, and Building Industry Days Conference, Debrecen (Hungary), Session Moderator, Hungary, 2009  
ULUSAL MAKINA TEORİSİ SEMPOZYUMU UMTS2009, KIBRIS, Session Moderator, Turkey, 2009  
ULUSAL MAKINA TEORİSİ SEMPOZYUMU, Attendee, KIBRIS-GİRNE, Turkey, 2009  
SAE 2009, DETROIT USA, Invited Speaker, United States Of America, 2009  
Building Services, Mechanical, and Building Industry Days Conference, Debrecen (Hungary), Session Moderator, Hungary, 2008  
ULUSAL MAKINA TEORİSİ SEMPOZYUMU, Attendee, SİVAS, Turkey, 2007  
ULUSAL MAKINA TEORİSİ SEMPOZYUMU, UMTS 2007, Session Moderator, Sivas, Turkey, 2007  
PROJE YÜRÜTÜCÜLERİ PROJE YÖNETİMİ ÇALIŞMA PROGRAMI-TUSSİDE, Attendee, Turkey, 2006  
ULUSAL MAKINA TEORİSİ SEMPOZYUMU, Attendee, KAYSERİ, Turkey, 2005  
ULUSAL MAKINA TEORİSİ SEMPOZYUMU UMTS2005, Session Moderator, Kayseri, Turkey, 2005

## Scholarships

ESEP Bursu / 2005, TUBITAK, 2005 - Continues

## Awards

YILDIRIM Ş., FULLY AUTOMATED DENTAL MEASURING SYSTEM, IRES, August 2015  
YILDIRIM Ş., SEVİM Ç., EN İYİ SUNUMLU BİLDİRİ ÖDÜLÜ, ICSMET 2015, March 2015  
YILDIRIM Ş., MOBİLYA PROJE PAZARI, AKDENİZ İHRACATCILARI BİRLİĞİ, June 2013  
YILDIRIM Ş., AVRUPA BİRLİĞİ PROJESİ BAŞARI ÖDÜLÜ, DEBRECEN VE ORDEA ÜNİVERSİTESİ, October 2012  
YILDIRIM Ş., Bilimsel Çalışma Ödülü / 2011, Erciyes Üniversitesi, May 2011  
YILDIRIM Ş., Onur Ödülü / 2009, Debrecen Üniversitesi, May 2009  
YILDIRIM Ş., Bilimsel Yayın Ödülü, Erciyes Üniversitesi, May 2005

## Non Academic Experience

CARDIFF UNIVERSITY