

Prof. MEHMET ÖNDER EFE

Personal Information

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Education Information

Doctorate, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Turkey 1996 - 2000

Post Graduate, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Sistem Ve Kontrol Mühendisliği, Turkey 1993 - 1996

Under Graduate, İstanbul Teknik Üniversitesi, Elektrik Elektronik Fakültesi, Elektronik Ve Haberleşme Mühendisliği, Turkey 1989 - 1993

Research Areas

Mechanical Engineering, Machine Theory and Dynamics, System Dynamics and Control, Robotics, Mechatronics, Aeronautical and Space Engineering, Aeronautical Engineering , Aircraft System Technologies, Flight Control Systems, Engineering and Technology

Academic Titles / Tasks

Professor, Hacettepe Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2013 - Continues

Professor, Türk Hava Kurumu Üniversitesi, Hava Ulaştırma Fakültesi, Pilotaj Bölümü, 2011 - 2013

Professor, Tobb Ekonomi Ve Teknoloji Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2009 - 2010

Associate Professor, Tobb Ekonomi Ve Teknoloji Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2004 - 2009

Assistant Professor, Atılım Üniversitesi, Mühendislik Fakültesi, Mekatronik Mühendisliği Bölümü, 2003 - 2004

Research Assistant, The Ohio State University, Department Of Electrical Engineering, 2002 - 2003

Research Assistant, Carnegie Mellon University, Department Of Electrical And Computer Engineering, 2001 - 2001

Research Assistant, Boğaziçi Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1996 - 2000

Professional Experience

Head of Department, Hacettepe Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2015 - Continues

Head of Department, Hacettepe Üniversitesi, Bilişim Enstitüsü, Sayısal İletişim Sistemleri Ve Bilgisayar Ağları Anabilim Dalı, 2014 - Continues

Head of Department, Hacettepe Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2013 - Continues

Vice Rector, Türk Hava Kurumu Üniversitesi, Hava Ulaştırma Fakültesi, 2011 - 2013

Dean, Türk Hava Kurumu Üniversitesi, Hava Ulaştırma Fakültesi, Pilotaj Bölümü, 2011 - 2013

Head of Department, Tobb Ekonomi Ve Teknoloji Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2008 - 2010

Deputy Head of Department, Tobb Ekonomi Ve Teknoloji Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2007 - 2008

Advising Theses

- EFE M. Ö. , Dönerkanat tipinde bir insansız hava aracıyla video tabanlı üst düzey işlevlerin tasarlanması, Post Graduate, N.İMAMOĞLU(Student), 2010
- EFE M. Ö. , Dönerkanat tipinde bir insansız hava aracının tasarımı, modellenmesi ve kontrolü, Post Graduate, M.ÖNKOL(Student), 2010
- EFE M. Ö. , Dönerkanat tipinde bir insansız hava aracının görüntü tabanlı kontrolü, Post Graduate, A.ERESSEN(Student), 2010
- EFE M. Ö. , İki eksenli bir helikopterin kontrolü, Post Graduate, Y.BUĞDAY(Student), 2010
- EFE M. Ö. , İşlemcilerde düşük güç tüketimine yönelik yöntemler, Post Graduate, Y.SİNAN(Student), 2007

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **H-2/H-infinity-Neural-Based FOPID Controller Applied for Radar-Guided Missile**
Yaghi M., EFE M. Ö.
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, vol.67, no.6, pp.4806-4814, 2020 (Journal Indexed in SCI)
- II. **Online path planning of mobile robot using grasshopper algorithm in a dynamic and unknown environment**
Elmi Z., EFE M. Ö.
JOURNAL OF EXPERIMENTAL & THEORETICAL ARTIFICIAL INTELLIGENCE, 2020 (Journal Indexed in SCI)
- III. **Disturbance/Uncertainty Estimator Based Integral Sliding-Mode Control**
Kurkcu B., KASNAKOĞLU C., EFE M. Ö.
IEEE TRANSACTIONS ON AUTOMATIC CONTROL, vol.63, no.11, pp.3940-3947, 2018 (Journal Indexed in SCI)
- IV. **Disturbance/Uncertainty Estimator Based Robust Control of Nonminimum Phase Systems**
Kurkcu B., KASNAKOĞLU C., EFE M. Ö.
IEEE-ASME TRANSACTIONS ON MECHATRONICS, vol.23, no.4, pp.1941-1951, 2018 (Journal Indexed in SCI)
- V. **Measurement and Control**
EFE M. Ö.
MEASUREMENT & CONTROL, vol.51, pp.3, 2018 (Journal Indexed in SCI)
- VI. **Dual boundary conditional integral backstepping control of a twin rotor MIMO system**
Haruna A., Mohamed Z., EFE M. Ö. , Basri M. A. M.
JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS, vol.354, no.15, pp.6831-6854, 2017 (Journal Indexed in SCI)
- VII. **A novel robust fuzzy control of an uncertain system**
BAYRAK A., GÜRSOY H., EFE M. Ö.
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.39, no.3, pp.324-333, 2017 (Journal Indexed in SCI)
- VIII. **Feedback control strategies for quadrotor-type aerial robots: a survey**
Ozbek N. S. , Onkol M., EFE M. Ö.
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.38, no.5, pp.529-554, 2016 (Journal Indexed in SCI)
- IX. **Advances in Control Theory and Applications: Selected papers from TOK 2013**
HAMAMCI S. E. , TAN N., EFE M. Ö. , Söylemez M. T.
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.37, no.5, pp.579-581, 2015 (Journal Indexed in SCI)
- X. **Recent Advances in Sliding Modes: From Control to Intelligent Mechatronics Preface**

Yu X., EFE M. Ö.

RECENT ADVANCES IN SLIDING MODES: FROM CONTROL TO INTELLIGENT MECHATRONICS, vol.24, 2015 (Journal Indexed in SCI)

XI. Sliding Mode Control for Unmanned Aerial Vehicles Research

EFE M. Ö.

RECENT ADVANCES IN SLIDING MODES: FROM CONTROL TO INTELLIGENT MECHATRONICS, vol.24, pp.239-255, 2015 (Journal Indexed in SCI)

Refereed Congress / Symposium Publications in Proceedings

I. Multiple Model Kalman and Particle Filters and Applications: A Survey

Akca A., EFE M. Ö.

15th International-Federation-of-Automatic-Control (IFAC) Symposium on Large Scale Complex Systems (IFAC LSS), Delft, Netherlands, 26 - 28 May 2019, vol.52, pp.73-78

II. Modelling of Atmospheric Parameters Using Artificial Neural Networks

Demirtas O., EFE M. Ö.

9th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 11 - 14 June 2019, pp.571-577

III. Forecasting BIST100 Index with Neural Network Ensembles

Beyaz K., EFE M. Ö.

11th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 28 - 30 November 2019, pp.940-944

IV. Intelligent mixed H-2/H-infinity FOPID controller optimized for radar guided missile

Yaghi M., EFE M. Ö.

6th International Conference on Control Engineering and Information Technology (CEIT), İstanbul, Turkey, 25 - 27 October 2018

V. Detection of Smart Phone Position on User using Artificial Neural Network Classifier

Bayar V., EFE M. Ö.

26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018

VI. Fractional Order PID Control of a Radar Guided Missile Under Disturbances

Yaghi M., EFE M. Ö.

9th International Conference on Information and Communication Systems (ICICS), Irbid, Jordan, 3 - 05 April 2018, pp.238-242

VII. Multi-objective Grasshopper Optimization Algorithm for Robot Path Planning in Static Environments

Elmi Z., EFE M. Ö.

19th IEEE International Conference on Industrial Technologies (ICIT), Lyon, France, 19 - 22 February 2018, pp.244-249

VIII. Trajectory Tracking Control Performance Analysis of a Quadrotor in the Presence of External Disturbances

Bayrak A., Demirezen M. U., EFE M. Ö.

2nd European Conference on Electrical Engineering and Computer Science (EECS), Bern, Switzerland, 20 - 22 December 2018, pp.335-341

IX. Path Planning using Model Predictive Controller based on Potential Field for Autonomous Vehicles

Elmi Z., EFE M. Ö.

44th Annual Conference of the IEEE Industrial-Electronics-Society (IECON), Washington, Kiribati, 20 - 23 October 2018, pp.2613-2618

X. Air Combat Learning from F-16 Flight Information

Karli M., EFE M. Ö., SEVER H.

IEEE International Conference on Fuzzy Systems (FUZZ-IEEE), Naples, Italy, 9 - 12 July 2017

XI. Adaptive Neural FOPID Controller Applied for Missile Guidance System

Yaghi M., EFE M. Ö.

43rd Annual Conference of the IEEE-Industrial-Electronics-Society (IECON), Beijing, China, 29 October - 01 November 2017, pp.2955-2960

XII. Nominal Model Based Switching Control of a Twin Rotor System

EFE M. Ö.

42nd Annual Conference of the IEEE-Industrial-Electronics-Society (IECON), Florence, Italy, 24 - 27 October 2016, pp.241-246

XIII. Technopolises, SMEs, Funding Agencies and IT-Roles in Engineering Education

EFE M. Ö.

15th International Conference on Information Technology Based Higher Education and Training (ITHET), İstanbul, Turkey, 8 - 10 September 2016

XIV. FPGA Based Offline 3D UAV Local Path Planner Using Evolutionary Algorithms for Unknown Environments

BAYRAK A., EFE M. Ö.

42nd Annual Conference of the IEEE-Industrial-Electronics-Society (IECON), Florence, Italy, 24 - 27 October 2016, pp.4778-4783

XV. CONTROL SYSTEM IMPLEMENTATION ON AN FPGA PLATFORM

GÜRSOY H., EFE M. Ö.

14th IFAC Conference on Programmable Devices and Embedded Systems (PDES), Brno, Czech Republic, 5 - 07 October 2016, vol.49, pp.425-430

XVI. MATLAB/Simulink Based Restructuring of the First Automatic Control Course in Engineering Curricula

EFE M. Ö.

15th International Conference on Information Technology Based Higher Education and Training (ITHET), İstanbul, Turkey, 8 - 10 September 2016

XVII. An Augmented PID Control Scheme for Robust Control

EFE M. Ö.

International Workshop on Recent Advances in Sliding Modes, İstanbul, Turkey, 9 - 11 April 2015

XVIII. A Novel Unmanned Aerial Surveillance Scheme

Imamoglu N., Eresen A., EFE M. Ö. , Kaynak O.

International Conference on Mechatronics and Control (ICMC), Jinzhou, China, 3 - 05 July 2014, pp.26-31

Supported Projects

EFE M. Ö. , TUBITAK Project, Visual Serving of Mobile Systems Mapping and Implementation of FPGA, 2015 - Continues

EFE M. Ö. , Project Supported by Other Private Institutions, Orta İrtifada Güvenli İHA Uçuşu için Motor Yönetim Sistemi Geliştirilmesi, 2017 - 2017

EFE M. Ö. , Project Supported by Other Private Institutions, Büyük Veri NoSQL Ailesinden Olan Çizge (Graph) Veritabanlarının Davranış, Fonksiyon ve Algoritmalarının İlişkisel Veritabanında Geliştirilmesi, 2016 - 2017

Citations

Total Citations (WOS):77

h-index (WOS):4