

## Kişisel Bilgiler

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## Eğitim Bilgileri

Doktora, Georgia Institute Of Technology, Aerospace Engineering, Amerika Birleşik Devletleri 1998 - 2003  
Lisans, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Havacılık Ve Uzay Mühendisliği Bölümü, Türkiye 1990 - 1995

## Yaptığı Tezler

Doktora, Adaptive Limit Detection and Limit Avoidance, Georgia Institute Of Technology, Aerospace Engineering, 2003

## Akademik Unvanlar / Görevler

Doç.Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, 2013 - 2017  
Yrd.Doç.Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, 2005 - 2013  
Öğretim Görevlisi Dr., Georgia Institute Of Technology, Aerospace Engineering, 2003 - 2005  
Araştırma Görevlisi, Georgia Institute Of Technology, Aerospace Engineering, 1998 - 2003  
Araştırma Görevlisi, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, 1995 - 1996

## Yönetilen Tezler

YAVRUCUK İ., Investigation of the star tracker algorithms and kalman filter integration, Yüksek Lisans, S.SARGIN(Öğrenci), 2019  
YAVRUCUK İ., Surrogate model based system identification and control of gas turbine engines, Doktora, S.EKİNCİ(Öğrenci), 2019  
YAVRUCUK İ., Fault tolerant flight control applications for a fixed wing UAV using linear and nonlinear approaches, Yüksek Lisans, B.ERGÖÇMEN(Öğrenci), 2019  
YAVRUCUK İ., DYNAMIC MODELING, CONTROL AND ADAPTIVE ENVELOPE PROTECTION SYSTEM FOR HORIZONTAL AXIS WIND TURBINES, Doktora, M.ŞAHİN(Öğrenci), 2018  
YAVRUCUK İ., Comparison of rotor inflow models for flight simulation fidelity, Yüksek Lisans, F.GÜNER(Öğrenci), 2016  
YAVRUCUK İ., Direct adaptive flight envelope protection, Doktora, G.GÜRSOY(Öğrenci), 2016  
YAVRUCUK İ., Development of an intelligent model prediction controller for autonomous helicopters, Yüksek Lisans, Ş.ESER(Öğrenci), 2016  
YAVRUCUK İ., LEBLEBİCİOĞLU M. K. , Control and guidance of a multi-mode unmanned aerial vehicle for increased versatility, Doktora, F.ÇAKICI(Öğrenci), 2016  
YAVRUCUK İ., Dynamic modelling and simulation of a wind turbine, Yüksek Lisans, A.HAZAL(Öğrenci), 2015  
TEKİNALP O., YAVRUCUK İ., Developing an investment decision methodology for helicopter systems related to technology factor and base price, Yüksek Lisans, G.KARA(Öğrenci), 2014  
YAVRUCUK İ., Kalman filter based applications for helicopters, Yüksek Lisans, M.OKATAN(Öğrenci), 2014  
YAVRUCUK İ., A reactionary obstacle avoidance algorithm for autonomous vehicles, Yüksek Lisans, G.YÜCEL(Öğrenci), 2012  
TEKİNALP O., YAVRUCUK İ., Development of a UAV testbed, Yüksek Lisans, Z.ÇAKIR(Öğrenci), 2011  
YAVRUCUK İ., Controller design and simulation for a helicopter during target engagement, Yüksek Lisans, S.AVCIOĞLU(Öğrenci), 2011  
YAVRUCUK İ., A probabilistic conceptual design and sizing approach for a helicopter, Yüksek Lisans, S.SELVİ(Öğrenci),

2010

YAVRUCUK İ., Neural network based online estimation of maneuvering steady states and control limits, Yüksek Lisans, G.GÜRSOY(Öğrenci), 2010

TEKİNALP O., YAVRUCUK İ., Development of control allocation methods for satellite attitude control, Yüksek Lisans, T.ÇİĞDEM(Öğrenci), 2010

YAVRUCUK İ., Adaptive control of guided missiles, Doktora, K.TİRYAKİ(Öğrenci), 2010

YAVRUCUK İ., Adaptive neural network applications on missile controller design, Yüksek Lisans, S.SAĞIROĞLU(Öğrenci), 2009

TEKİNALP O., YAVRUCUK İ., Multidisciplinary and multiobjective design optimization of an unmanned combat aerial vehicle (UCAV), Yüksek Lisans, N.ÇAVUŞ(Öğrenci), 2009

YAVRUCUK İ., Adaptive controller applications for rotary wing aircraft models of varying simulation fidelity, Yüksek Lisans, O.TARIMCI(Öğrenci), 2009

YAVRUCUK İ., Adaptation of a control system to varying missile configurations, Yüksek Lisans, Ö.EKİNCİ(Öğrenci), 2009

YAVRUCUK İ., Evaluation and comparison of helicopter simulation models with different fidelities, Yüksek Lisans, D.YILMAZ(Öğrenci), 2008

YAVRUCUK İ., Mathematical model development of the anti torque system of a NOTAR helicopter, Yüksek Lisans, H.MURAT(Öğrenci), 2008

YAVRUCUK İ., Design of an autonomous landing control algorithm for a fixed wing unmanned aerial vehicle (UAV), Yüksek Lisans, V.KARGIN(Öğrenci), 2007

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- **Fast engine model for FMU-less small turbojet engines**

Ekinci S., YAVRUCUK İ.

PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING, cilt.234, ss.416-427, 2020 (SCI İndekslerine Giren Dergi)

- **Direct Adaptive Limit and Control Margin Estimation with Concurrent Learning**

Gursoy G., YAVRUCUK İ.

JOURNAL OF GUIDANCE CONTROL AND DYNAMICS, cilt.39, ss.1356-1373, 2016 (SCI İndekslerine Giren Dergi)

- **Concurrent Learning Enabled Adaptive Limit Detection for Active Pilot Cueing**

Gursoy G., YAVRUCUK İ.

JOURNAL OF AEROSPACE INFORMATION SYSTEMS, cilt.11, ss.542-550, 2014 (SCI İndekslerine Giren Dergi)

- **Mathematical Modeling of the NOTAR Antitorque System for Flight Simulation**

YAVRUCUK İ., Bakir H. M. , UZOL O.

JOURNAL OF THE AMERICAN HELICOPTER SOCIETY, cilt.58, 2013 (SCI İndekslerine Giren Dergi)

- **Online Dynamic Trim and Control Limit Estimation**

YAVRUCUK İ., Prasad J. V. R.

JOURNAL OF GUIDANCE CONTROL AND DYNAMICS, cilt.35, ss.1647-1656, 2012 (SCI İndekslerine Giren Dergi)

- **A Low Cost Flight Simulator Using Virtual Reality Tools**

YAVRUCUK İ., Kubali E., Tarimci O.

IEEE AEROSPACE AND ELECTRONIC SYSTEMS MAGAZINE, cilt.26, ss.10-14, 2011 (SCI İndekslerine Giren Dergi)

- **Flight Evaluation of a Reactionary Envelope Protection System for UAVs**

Unnikrishnan S., Prasad J. V. R. , YAVRUCUK İ.

JOURNAL OF THE AMERICAN HELICOPTER SOCIETY, cilt.56, 2011 (SCI İndekslerine Giren Dergi)

- **Panel-Method-Based Path Planning and Collaborative Target Tracking for Swarming Micro Air Vehicles**

UZOL O., YAVRUCUK İ., SEZER UZOL N.

JOURNAL OF AIRCRAFT, cilt.47, ss.544-550, 2010 (SCI İndekslerine Giren Dergi)

- **Envelope Protection for Autonomous Unmanned Aerial Vehicles**

YAVRUCUK İ., Prasad J. V. R. , Unnikrishnan S.

JOURNAL OF GUIDANCE CONTROL AND DYNAMICS, cilt.32, ss.248-261, 2009 (SCI İndekslerine Giren Dergi)

## Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- **Development of an Intelligent Least Squares Based Linear Controller for Autonomous Helicopters**

Kubali E., YAVRUCUK İ.

International Conference on Unmanned Aircraft Systems (ICUAS), Virginia, Amerika Birleşik Devletleri, 7 - 10 Haziran 2016, ss.242-251

- **APPLICATION OF A FUZZY LOGIC CONTROLLER FOR SPEED CONTROL ON A SMALL-SCALE TURBOJET ENGINE**

Usenmez S., Ekinci S., UZOL O., YAVRUCUK İ.

ASME Turbo Expo: Turbine Technical Conference and Exposition, Düsseldorf, Almanya, 16 - 20 Haziran 2014

- **Dynamic Inversion Based Control of a Missile with L1 Adaptive Control Augmentation**

Kutluay K. T. , YAVRUCUK İ.

IEEE International Conference on Control Applications Part of 2010 IEEE Multi-Conference on Systems and Control, Yokohama, Japonya, 8 - 10 Eylül 2010, ss.2374-2379

- **Gimbal Angle Restricted Control Moment Gyroscope Clusters**

TEKİNALP O., Elmas T., YAVRUCUK İ.

4th International Conference on Recent Advances in Space Technologies, İstanbul, Türkiye, 11 - 13 Haziran 2009, ss.585-590

## Atıflar

Toplam Atıf Sayısı (WOS):51

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