

Prof. MAHMUT ADİL YÜKSELEN

Personal Information

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International Researcher IDs

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Education Information

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Uçak Mühendisliği (Dr), Turkey 1982 - 1987

Postgraduate, Istanbul Technical University, Makine Fakültesi, Makine Mühendisliği (YI), Turkey 1974 - 1976

Undergraduate, Istanbul Technical University, Makine Fakültesi, Uçak Mühendisliği Pr., Turkey 1970 - 1974

Foreign Languages

English, C1 Advanced

Research Areas

Engineering and Technology

Academic Titles / Tasks

Professor, Istanbul Gelisim University, FACULTY OF ENGINEERING AND ARCHITECTURE, AERONAUTICAL ENGINEERING, 2020 - Continues

Professor, Istanbul Technical University, Uçak Ve Uzay Bilimleri, Uçak Mühendisliği, 1998 - 2020

Associate Professor, Istanbul Technical University, Uçak Ve Uzay Bilimleri Fakültesi, Uçak Mühendisliği Bölümü, 1988 - 1998

Lecturer, Istanbul Technical University, Uçak Ve Uzay Bilimleri Fakültesi, Uçak Mühendisliği Bölümü, 1987 - 1988

Research Assistant, Istanbul Technical University, Uçak Ve Uzay Bilimleri Fakültesi, Uçak Mühendisliği Bölümü, 1976 - 1987

Courses

UCK111 Uçak Mühendisliğine Giriş ve Etik, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006, 2004 - 2005

UCK351 Aerodinamik, Undergraduate, 2015 - 2016, 2014 - 2015, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2006 - 2007, 2005 - 2006, 2004 - 2005, 2003 - 2004, 2002 - 2003, 2001 - 2002, 2000 - 2001

UCK419 Hesaplamalı Aerodinamik, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008

STA201 Statik, Undergraduate, 2014 - 2015, 2013 - 2014

UZB386 Sınır Tabaka, Undergraduate, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008
UCK348 Mühendislikte Bilgisayar Uygulamaları, Undergraduate, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009
Uygulamalı Sayısal Yöntemler (Hava Harp Okulu HUTEN), Postgraduate, 2008 - 2009, 2007 - 2008, 2004 - 2005
UZB362 Sıkıştırılabilir Aerodinamik, Undergraduate, 2006 - 2007, 2005 - 2006, 2004 - 2005
UUM511 Viskoz Akışlar, Postgraduate, 2003 - 2004, 2002 - 2003
Aerodinamik I (Hava Harp Okulu), Undergraduate, 2001 - 2002, 2000 - 2001
Sürtünmeli Akış (HHO HUTEN), Postgraduate, 2001 - 2002
Aerodinamik II (Hava Harp Okulu), Undergraduate, 2001 - 2002, 2000 - 2001
UUM Kanat Profili Analiz ve Dizaynı, Postgraduate, 2000 - 2001
HHO HUTEN Potansiyel Akım, Postgraduate, 2000 - 2001

Advising Theses

MAHMUT ADİL Y., A new nonlinear lifting line method for configuration aerodynamics and deep learning based aerodynamic surrogate models, Postgraduate, H.KARALI(Student), 2020
MAHMUT ADİL Y., Aerodynamic topology optimization of a radome using the genetic algorithm, Postgraduate, İ.DAYLAN(Student), 2020
MAHMUT ADİL Y., Kanat gövde etkileşiminin panel yöntemlerle incelenmesi, Postgraduate, E.KOÇ(Student), 2019
MAHMUT ADİL Y., Taşıyıcı yüzey sistemlerinin girdap kafes yöntemi ile analizi ve genetik algoritma ile eniyilemesi, Postgraduate, O.MİRZA(Student), 2018
MAHMUT ADİL Y., Pervanelerin girdap halkası yöntemi ile aerodinamik analizi, Postgraduate, S.KAYNAR(Student), 2017
MAHMUT ADİL Y., Pervanelerin girdap kafes yöntemiyle aerodinamik analizi, Postgraduate, N.ELMAS(Student), 2015
MAHMUT ADİL Y., Turaç insansız hava aracının aerodinamik tasarım, modelleme ve analizi, Postgraduate, A.VURUŞKAN(Student), 2014
MAHMUT ADİL Y., Uçakların girdap kafes yöntemiyle aerodinamik analizi, Postgraduate, E.ŞAHİN(Student), 2013
MAHMUT ADİL Y., Pervane aerodinamiği için girdap kafes uygulamaları, Postgraduate, E.ŞAHİN(Student), 2013

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A new nonlinear lifting line method for aerodynamic analysis and deep learning modeling of small unmanned aerial vehicles**
Karali H., Inalhan G., Umut Demirezen M., Adil Yukselen M. A.
International Journal of Micro Air Vehicles, vol.13, 2021 (SCI-Expanded)
- II. **Rapid Prototyping of a Fixed-Wing VTOL UAV for Design Testing**
Aktas Y. O., Ozdemir U., Dereli Y., Tarhan A. F., Cetin A., Vuruskan A., Yuksek B., Cengiz H., Basdemir S., Ucar M., et al.
Journal of Intelligent and Robotic Systems: Theory and Applications, vol.84, no.1-4, pp.639-664, 2016 (SCI-Expanded)
- III. **UNSTEADY THERMAL STUDIES OF GUN BARRELS DURING THE INTERIOR BALLISTIC CYCLE WITH NON-HOMOGENOUS GUN BARREL MATERIAL THERMAL CHARACTERISTICS**
AKÇAY M., YÜKSELEN M. A.
Isı Bilimi ve Tekniği Dergisi, vol.34, no.2, pp.75-81, 2014 (SCI-Expanded)
- IV. **Flow of power-law fluids over a moving wedge surface with wall mass injection**
Akçay M., Yükselen M. A.
Archive of Applied Mechanics, vol.81, no.1, pp.65-76, 2011 (SCI-Expanded)
- V. **A unifying grid approach for solving potential flows applicable to structured and unstructured grid configurations**
Çete A. R., Yükselen M. A., Kaynak Ü.
Computers and Fluids, vol.37, no.1, pp.35-50, 2008 (SCI-Expanded)
- VI. **Drag reduction of a nonnewtonian fluid by fluid injection on a moving wall**

Akçay M., Adil Yükselen M. A.

Archive of Applied Mechanics, vol.69, no.3, pp.215-225, 1999 (SCI-Expanded)

Articles Published in Other Journals

- I. **Computer assisted aerodynamics education**
Yükselen M. A.
PROCEDIA SOCIAL AND BEHAVIOURAL SCIENCES, vol.47, pp.362-368, 2012 (Conference Book)
- II. **Basic equations for incompressible, non-Newtonian fluids in curvilinear, non-orthogonal and accelerated coordinate systems**
Yükselen M. A.
ACTA MECHANICA, no.118, pp.39-54, 1996 (Scopus)
- III. **Superposition technique for potential flow around an aerofoil and control of the circulation**
Yükselen M. A.
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.0,22101310221996, pp.1013-1022, 1996 (Scopus)
- IV. **Superposition technique for two dimensional potential flow around multielement aerofoils**
Yükselen M. A.
MECHANICS RESEARCH COMMUNICATIONS, vol.23, no.1, pp.103-110, 1996 (Scopus)
- V. **Basic equations for incompressible, non-Newtonian fluids in curvilinear, non-orthogonal and accelerated coordinate systems**
Yükselen M. A., Erim M.
Acta Mechanica, vol.118, pp.39-54, 1996 (Scopus)
- VI. **The wind energy potential of Gökçeada in the Northern Aegean Sea**
Yükselen M. A.
RENEWABLE ENERGY, vol.6, no.7, pp.679-685, 1995 (Scopus)
- VII. **A general iterative method to design Kármán-Trefftz and Joukowsky airfoils**
Yükselen M. A., Erim M.
International Journal for Numerical Methods in Engineering, vol.20, no.7, pp.1349-1360, 1984 (Scopus)

Books & Book Chapters

- I. **1-7**
Yükselen M. A., Vatandaş O. E.
in: AERODİNAMİĞİN ESASLARI (Fundamentals of Aerodynamics çevirisi), Yükselen, M. Adil, Editor, Nobel Yayın Dağıtım, İstanbul, pp.1-560, 2024
- II. **UÇUŞA BAŞLANGIÇ**
Yükselen M. A.
McGraw-Hill Companies , Ankara, 2020

Refereed Congress / Symposium Publications in Proceedings

- I. **A novel physics informed deep learning method for simulation-based modelling**
Karali H., Demirezen M. U., Yükselen M. A., Inalhan G.
AIAA Science and Technology Forum and Exposition, AIAA SciTech Forum 2021, Virtual, Online, 11 - 15 January 2021, pp.1-12
- II. **Design of a deep learning based nonlinear aerodynamic surrogate model for uavs**
Karali H., Demirezen M. U., Yükselen M. A., Inalhan G.

AIAA Scitech Forum, 2020, Florida, United States Of America, 6 - 10 January 2020, vol.1 PartF, pp.1-14

III. A PRACTICAL TOOL FOR DETERMINATION AND OBSERVATION OF 3D WING AERODYNAMIC CHARACTERISTICS AT HIGH ANGLES OF ATTACK

Karali H., Yükselen M. A.

10th ANKARA INTERNATIONAL AEROSPACE CONFERENCE, Ankara, Turkey, 18 - 20 September 2019, pp.147

IV. A GENETIC ALGORITHM BASED DESIGN OPTIMIZATION METHOD FOR WING-TAIL COMBINATIONS OF UAVs

Yıldız Ş., Yükselen M. A.

10th ANKARA INTERNATIONAL AEROSPACE CONFERENCE, Ankara, Turkey, 18 - 20 September 2019, pp.149

V. A new non-linear lifting line method for 3D analysis of wing/configuration aerodynamic characteristics with application to UAVs

Karali H., Yükselen M. A., İnalhan G.

AIAA Scitech Forum, 2019, California, United States Of America, 7 - 11 January 2019

VI. A low cost prototyping approach for design analysis and flight testing of the TURAC VTOL UAV

Aktas Y. O., Ozdemir U., Dereli Y., Tarhan A. F., Cetin A., Vuruskan A., Yuksek B., Cengiz H., Basdemir S., Ucar M., et al.
2014 International Conference on Unmanned Aircraft Systems, ICUAS 2014, Orlando, FL, United States Of America, 27 - 30 May 2014, pp.1029-1039

VII. Dynamic modeling of a fixed-wing VTOL UAV

Vuruskan A., Yuksek B., Ozdemir U., Yükselen A., İnalhan G.

2014 International Conference on Unmanned Aircraft Systems, ICUAS 2014, Orlando, FL, United States Of America, 27 - 30 May 2014, pp.483-491