

EK-3
ÖZGEÇMİŞ (ÖRNEK FORM)

1. Adı Soyadı: Mustafa Kaya

2. Doğum Tarihi: 1977

3. Unvanı: Dr. Öğr. Üye.

4. Öğrenim Durumu: Doktora

Derece	Alan	Üniversite	Yıl
Lisans	Havacılık ve Uzay Müh.	ODTÜ	2000
Y. Lisans	Havacılık ve Uzay Müh.	ODTÜ	2003
Doktora	Havacılık ve Uzay Müh.	ODTÜ	2009

5. Akademik Unvanlar:

Yardımcı Doçentlik Tarihi : Nisan 2011

Doçentlik Tarihi :

Profesörlük Tarihi :

6. Yönetilen Yüksek Lisans ve Doktora Tezleri

Yüksek Lisans Tezleri

- Tansu Sevine, Reconstruction of the Atmospheric Flows Based on Proper Orthogonal Decomposition Method, MSc. Thesis, Middle East Technical University, 2017 (Cosupervised)
- Osman Aycı, Development and Numerical Test of a Generic Flight Dynamics Model of a Helicopter, MSc. Thesis, University of Turkish Aeronautical Association, 2016

Doktora Tezleri

- Ali Belhaj, Similarity Analysis of Unsteady Laminar Incompressible Stagnation Point Flow Boundary Layer in Presence of Oscillating Motion, PhD. Thesis, University of Turkish Aeronautical Association, 2018

7. Yayınlar

Uluslararası hakemli dergilerde yayınlanan makaleler (SCI & SSCI & Arts and Humanities)

- M. Kaya, A CFD Based Application of Support Vector Regression to Determine the Optimum Smooth Twist for Wind Turbine Blades, Sustainability, Vol. 11, No:16, Aug. 2019, 4502.
- Kaya M. and Elfarra M. "Optimization of the Taper/Twist Stacking Axis Location of NREL VI Wind Turbine Rotor Blade Using Neural Networks Based on Computational Fluid Dynamics Analyses", Journal of Solar Energy Engineering - Including Wind Energy and Building Energy Conservation, Volume 141, Issue 1, Feb. 2019.
- Elfarra M. and Kaya M. "Comparison of Optimum Spline Based Probability Density Functions to Parametric Distributions for the Wind Speed Data in terms of Annual Energy Production", Energies, Volume 11, Issue 11, 2018. doi:10.3390/en11113190.
- H.E. Konokman, A. Kayran and M. Kaya, Aircraft Vulnerability Assessment Against Fragmentation Warhead, Aerospace Science and Technology, Vol. 67, Aug. 2017, pp. 215-227
- M. Kaya, I.H. Tuncer, K.D. Jones and M.F. Platzer, Optimization of Flapping Motion Parameters for Two Airfoils in a Biplane Configuration, Journal of Aircraft, Vol. 46, No. 2, March-April 2009, pp. 583-592
- M. Kaya and I.H. Tuncer, Non-Sinusoidal Path Optimization of a Flapping Airfoil, AIAA Journal, Vol. 45, No. 8, Aug. 2007, pp. 2075-2082.
- I.H. Tuncer and M. Kaya, Optimization of Flapping Airfoils for Maximum Thrust and Propulsive Efficiency, AIAA Journal, Vol. 43, No. 11, Nov. 2005, pp. 2329-2336.
- I.H. Tuncer and M. Kaya, Thrust Generation Caused by Flapping Airfoils in a Biplane Configuration, Journal of Aircraft, Vol. 40, No. 3, May-June 2003, pp. 509-515

Uluslararası diğer hakemli dergilerde yayınlanan makaleler

- Kaya M. and Elfarra M. "Effect of taper modification on the performance of NREL VI wind turbine blade for low and mid wind speeds", Wind Engineering, Volume 43, No 4, pp. 392-403, 2019.
- Kaya M. and Elfarra M. "CFD Based Optimization of Oscillatory Wing Motion for Maximum Energy Harvesting from Wind", International Journal of Renewable Energy Research, Vol. 8, No. 1, 2018.

Uluslararası bilimsel toplantınlarda sunulan ve bildiri kitabında (*Proceedings*) basılan bildiriler

- O. Ayisit and M. Kaya, Determination of Shaped Charge Jet Characteristics Using a Neural Networks Model Based on Hydrocode Simulations, 10th Ankara International Aerospace Conference, Ankara, Turkey, Sept. 18-20, 2019.
- M. Kaya and M. Elfarra, Effect of Taper Distribution on the Torque and Thrust Generated by a Wind Turbine Rotor Blade, 2019 10th International Renewable Energy Congress, Sousse, Tunisia, March 26-28, 2019.
- M. Kaya, M. Elfarra and F. Kadioglu, Investigation of the Effect of Taper Stacking Location on Drag Force for ONERA M6 Wing, AIAA-2019-2123, AIAA Scitech 2019 Forum, San Diego, California, Jan. 7-11, 2019.
- M. Kaya, M. Elfarra and F. Kadioglu, A Parametric CFD Study for the Effect of Taper/Twist Stacking Point Location on the Torque of NREL VI Wind Turbine Rotor Blade, AIAA-2018-1496, 2018 Wind Energy Symposium, Kissimmee, Florida, Jan. 8-12, 2018.
- M. Elfarra, M. Kaya and F. Kadioglu, A Parametric CFD Study for the Effect of Spanwise Parabolic Chord Distribution on the Thrust of an Untwisted Helicopter Rotor Blade, AIAA2018-1795, 2018 AIAA Aerospace Sciences Meeting, Kissimmee, Florida, Jan. 8-12, 2018.
- M. Kaya and M. Elfarra, Numerical Optimization of Oscillatory Motion of a Flapping Airfoil for Maximum Power Production from Wind Energy, 8th Ankara International Aerospace Conference, Ankara, Turkey, Sept. 10-12, 2015.
- H.E. Konokman, A. Kayran and M. Kaya, Analysis of Aircraft Survivability Against Fragmenting Warhead Threat, AIAA-2014-0355, 55th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference, National Harbor, Maryland, Jan. 13-17, 2014.
- M.O. Efe, M. Kaya, M. Elfarra, R. Ozdemir, "Autonomous Trajectory Tracking and Imaging via a Quadrotor Type UAV: A System Integration Approach, 20th Int. Conf. on Mechatronics and Machine Vision in Practice (M2VIP'13), Ankara, Turkey, Sept. 20 2013, pp. 1-6
- H.E. Konokman, A. Kayran and M. Kaya, Survivability Analysis of Aircraft Under Fragmentation Warhead Threat, 7th Ankara International Aerospace Conference, Ankara, Turkey, Sept. 11-13, 2013.
- M. Kaya, M.A. Ak and I.H. Tuncer, An Implementation of Parallel GMRES Solution Method on a 3-D Unstructured Flow Solver, 5th Ankara International Aerospace Conference, Ankara, Turkey, Aug. 17-19, 2009.
- M. Kaya, G. Ahmet, S. Kumru and I.H. Tuncer, Development and Application of a POD Based Data Assimilation Method for Meteorological Flowfields, 5th Ankara International Aerospace Conference, Ankara, Turkey, Aug. 17-19, 2009.
- M. Kaya and I.H. Tuncer, Path Optimization of Thrust Producing Flapping Airfoils Using Response Surface Methodology, ECCOMAS 2008, Venice, Italy, 30 June - 4 July, 2008.
- M. Kaya and I.H. Tuncer, Path Optimization of Dual Airfoils Flapping in a Biplane Configuration Using Response Surface Methodology in a Parallel Computing Environment, Proceedings of Parallel CFD 2008 Conference, Lyon, France, May 19-22, 2008.
- M. Kaya and I.H. Tuncer, Response Surface Method for the Maximization of Thrust in Flapping Airfoils, 4th Ankara International Aerospace Conference, Ankara, Turkey, Sept. 10-12, 2007.
- M. Kaya, I.H. Tuncer, K.D. Jones and M.F. Platzer, Optimization of Aeroelastic Flapping Motion of Thin Airfoils in a Biplane Configuration for Maximum Thrust, 37th AIAA Computational Fluid Dynamics Conference, Miami, Florida, June 25-28 2007.

- M. Kaya and I.H. Tuncer, Non-Sinusoidal Path Optimization of Dual Airfoils Flapping in a Biplane Configuration, Proceedings of Parallel CFD 2007 Conference, Antalya, Turkey, May 21-24, 2007.
- M. Kaya, I.H. Tuncer, K.D. Jones and M.F. Platzer, Optimization of Flapping Motion of Airfoils in a Biplane Configuration for Maximum Thrust and/or Efficiency, AIAA Paper 2007-0484, 45th AIAA Aerospace Sciences Meeting and Exhibit, Reno, Nevada, Jan. 8-11 2007.
- I.H. Tuncer and M. Kaya, Path Optimization of Flapping Airfoils Based on NURBS, Proceedings of Parallel CFD 2006 Conference, Busan, Korea, May 15-18, 2006.
- M. Kaya, I.H. Tuncer, A. Spentzos, G.N. Barakos and K. Badcock, Numerical Investigation of 3-D Effects on Thrust Generation of Flapping Airfoils, 3rd Ankara International Aerospace Conference, Ankara, Turkey, Aug. 22-25, 2005.
- M. Kaya and I.H. Tuncer, Path Optimization of Flapping Airfoils for Maximum Thrust Based on Unsteady Viscous Flow Solutions, 3rd Ankara International Aerospace Conference, Ankara, Turkey, Aug. 22-25, 2005.
- J. Young, J.C.S. Lai, M.Kaya and I.H. Tuncer, Thrust and Efficiency of Propulsion by Oscillating Foils, Third International Conference on Computational Fluid Dynamics, ICCFD3, Toronto, Canada, July 12 - 16, 2004.
- I.H. Tuncer and M. Kaya, Parallel Optimization of Flapping Airfoils in a Biplane Configuration for Maximum Thrust, Proceedings of Parallel CFD 2004 Conference, Gran Canaria, Canary Islands, Spain, May 24-27, 2004.
- I.H. Tuncer and M. Kaya, Optimization of Flapping Airfoils For Maximum Thrust and Propulsive Efficiency, 3rd International Conference on Advanced Engineering Design, Prague, Czech Republic, June 1-4 2003.
- I.H. Tuncer and M. Kaya, Optimization of Flapping Airfoils For Maximum Thrust, AIAA Paper 2003-0420, 41st AIAA Aerospace Sciences Meeting and Exhibit, Reno, Nevada, Jan. 6-9 2003.
- I.H. Tuncer and M. Kaya, Parallel Computation of Flows Around Flapping Airfoils in Biplane Configuration, Proceedings of Parallel CFD 2002 Conference, Kansai Science City, Japan, May 20-22, 2002.

Yazılan uluslararası kitaplar veya kitaplarda bölümler

Ulusal hakemli dergilerde yayınlanan makaleler

- Kaya M. and Elfarra M. "Investigation of the Effect of Taper Stacking Location on Aerodynamic Loads for ONERA M6 Wing at a Fixed Angle of Attack", Journal of Aeronautics and Space Technology, Volume 12, No. 1, 2019.
- Elfarra M. and Kaya M., "CFD Analysis of the Effect of Parabolic Taper Distribution of an Untwisted Helicopter Rotor Blade", Journal of Aeronautics and Space Technology, Vol. 11, No. 2, 2018, pp. 59-70.

Ulusal bilimsel toplantılarında sunulan ve bildiri kitabında basılan bildiriler

- A. Samancı, A. Can ve M. Kaya, C, ok Hafif Hava Aracı Olarak Konsept Bir Planör Tasarımı, III. Uluslararası Endüstriyel Tasarım ve Mühendislik Sempozyumu, Antalya, 22-25 Kasım 2018.
- M. Kaya ve M. Elfarra, Rüzgar Enerjisinden Maksimum Güç Üretilimi ve Verimi için Salınır Kanat Kesitlerinin Salınma Hareketi Eniyilemesi, V. Ulusal Havacılık ve Uzay Konferansı, Kayseri, 8-10 Eylül 2014.
- R. Özdemir, M. Cihan, M. Kaya, M. Elfarra ve M. Ö. Efe, Döner Kanatlı İnsansız Hava Aracı Kullanarak Bölgesel Gözetim Amaçlı Kişi ve Nesne Takibi, IV. Ulusal Havacılık ve Uzay Konferansı, İstanbul, 12-14 Eylül 2012.
- G. Ahmet, S. Kumru, M. Kaya ve I.H. Tuncer, Meteorolojik Hava Tahminleri İçin Uyumlu Dik Ayırışım (POD) Yöntemiyle Veri Asimilasyonu, III. Ulusal Havacılık ve Uzay Konferansı, Eskişehir, 16-18 Eylül 2010.
- M. Kaya ve I.H. Tuncer, İki Çırpan Kanadın Ürettiği İtkinin Hareket Eden ve Bozulan Çözüm Ağlarında Eniyileştirilmesi, I. Ulusal Havacılık ve Uzay Konferansı, Ankara, 21-23 Eylül 2006.
- M. Kaya ve I.H. Tuncer, Maximum İtki İçin Çırpan Kanat Kesitlerinde Yörünge Eniyileştirilmesi, XIV.

Ulusal Mekanik Kongresi, Mustafa Kemal Üniversitesi, Antakya, 12-16 Eylül 2005.

- M. Kaya ve I.H. Tuncer, Çırpan Kanat Kesitlerinde İtkinin Yapay Zeka İle Eniyileştirilmesi, HITEK 2004 Havacılıkta İleri Teknolojiler Konferansı, 9-10 Aralık 2004.
- M. Kaya ve I.H. Tuncer, Üst Üste Çırpan İki Kanat Kesitinin Maksimum İtki İçin Paralel Eniyileştirilmesi, V. Kayseri Havacılık Sempozyumu, 13-14 Mayıs 2004.
- M. Kaya ve I.H. Tuncer, Çırpan Kanat Kesitlerinde İtkinin Uretiminin Hesaplanması ve Deneysel Sonuçlarla Karşılaştırılması, V. Kayseri Havacılık Sempozyumu, 13-14 Mayıs 2004.
- M. Kaya ve I.H. Tuncer, Çırpan Kanat Kesitlerinde İtkinin Paralel Olarak Hesaplanması ve Eniyileştirilmesi, IV. Kayseri Havacılık Sempozyumu 13-15 Mayıs 2002.

Diger yayınlar

Uluslararası atıflar

125

8. Ulusal & Uluslararası Projeler

- Numerical and Experimental Investigation of Oscillating Wings for Power Production from Wind Energy. Supported by the Scientific and Technological Research Council of Turkey (TÜBİTAK-1001), 2013 – 2015. Budget: 100000 US\$, Position: Leader.
- Low-altitude UAV for Regional Supervision and Ground Station Development, Supported by Ankara Development Agency, 2012. Budget: 250000 \$, Position: Researcher.

9. İdari Görevler

Dekan Yardımcısı: 2019 - Devam

10. Bilimsel ve Mesleki Kuruluşlara Üyelikler

11. Ödüller

- En iyi araştırma: XIVth National Mechanics Convention Sept. 12-16, 2005 by TUMTMK (Turkish National Committee for Theoretical and Applied Mechanics).

12. Son iki yılda verdığınız lisans ve lisansüstü düzeydeki dersler için aşağıdaki tabloyu doldurunuz.

Akademik Yıl	Dönem	Dersin Adı	Haftalık Saati		Öğrenci Sayısı
			Teorik	Uygulama	
2018-2019	Güz	Aeronautical Engineering Design	3	0	43
		Mühendislik Matematiği	3	0	25
		Numerical Methods	3	0	66
2019-2020	İlkbahar	Flight Mechanics	3	0	38
		Mühendislikte Sayısal Yöntemler	3	0	24
	Güz	Mühendislik Matematiği	3	0	21
	İlkbahar	Advanced Mathematics for Engineers	3	0	13

Not: Açılmışsa, yaz döneminde verilen dersler de tabloya ilave edilecektir.