Prof. ISMAIL HAKKI TUNCER

Personal Information

Office Phone: +90 312 210 4289

Email: ituncer@metu.edu.tr

Web: https://avesis.metu.edu.tr/ituncer

International Researcher IDs

ScholarID: FYEu038AAAAJ ORCID: 0000-0002-5457-5841

Publons / Web Of Science ResearcherID: ABA-1418-2020

ScopusID: 7005932711 Yoksis Researcher ID: 8694

Education Information

Doctorate, Georgia Institute of Technology, Aerospace Engineering, United States Of America 1984 - 1988
Postgraduate, Purdue University, Mechanical Engineering, United States Of America 1981 - 1983
Undergraduate, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, Turkey 1976 - 1981

Foreign Languages

English, C1 Advanced

Dissertations

Postgraduate, Design of Three-Dimensional Finite Element Grids for Transonic Flows around Wing-body Combinations, Purdue University, Mechanical Engineering, 1983

Doctorate, Unsteady Aerodynamics of Oscillating and Rapidly Pitched Airfoils, Georgia Institute Of Technology, Aerospace Engineering, 1983

Research Areas

Atmospheric Physics, Simulation and Modelling, Parallel Algorithms, Numerical Algorithms, Wind power, Optimization, Numerical Analysis, Aerodynamics

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2005 - Continues

Academic and Administrative Experience

Head of Department, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2018 - Continues

Manager of Research and Application Center, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2017 - 2018

Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2006 - 2009

Advising Theses

TUNCER İ. H., Adjoint based design optimization of subsonic airfoils with a panel code, Postgraduate, B.SARIKAYA(Student), 2022

TUNCER İ. H., Computation of vortical flow fields over a close-coupled delta canard-wing configuration and adjoint based configuration optimization, Postgraduate, A.TİKENOĞULLARI(Student), 2022

TUNCER İ. H., Adjoint based shape optimization of semi-submerged inlets and development of a novel boundary layer diverter, Doctorate, U.CAN(Student), 2022

TUNCER İ. H., Aerodynamic shape optimization of a wing using 3D flow solutions with SU2 and response surface methodology, Postgraduate, B.YASİN(Student), 2021

TUNCER İ. H., Adjoint-based aerodynamic shape optimization of a strake-delta wing configuration, Postgraduate, K.YUTÜK(Student), 2021

TUNCER İ. H., Adjoint based aerodynamic shape optimization of subsonic submerged intake, Doctorate,

A.AHMED (Student), 2021

TUNCER İ. H., Forebody optimization of a jet trainer aircraft using response surface methodology with genetic algorithm, Postgraduate, Ö.KANDEMİR(Student), 2021

Tuncer İ. H., Yücel H., Development of a Discrete Adjoint-Based Aerodynamic Shape optimization for Natural Laminar Flows, Doctorate, H.Kaya(Student), 2020

Tuncer İ. H., Numerical simulations of wind turbine wake interactions using actuator line and LES models, Postgraduate, H.CAN(Student), 2019

Tuncer İ. H., Adjoint-based design optimization of a hypersonic inlet, Postgraduate, M.BAŞARAN(Student), 2019

TUNCER İ. H., KAYRAN A., Coupling of a multibody simulation tool for the analysis of rotary systems with a panel based flow solver and a navier-stokes flow solver, Postgraduate, S.SOĞANCI(Student), 2018

TUNCER İ. H., ÖZGEN S., Ice accretion prediction on wind turbine blades and aerodynamic shape optimization for minimizing power production losses, Doctorate, Ö.YIRTICI(Student), 2018

TUNCER İ. H., Unsteady atmospheric flow solutions with OpenFOAM coupled with the numerical weather prediction software, WRF, Doctorate, E.LEBLEBİCİ(Student), 2018

TUNCER İ. H., Reconstruction of the atmospheric flows based on proper orthogonal decomposition method, Postgraduate, T.SEVİNE(Student), 2017

TUNCER İ. H., KAYA M., Reconstruction of atmospheric flows based on proper orthogonal decomposition method, Postgraduate, T.Sevine(Student), 2017

TUNCER İ. H., Investigation of missiles with strake fins and reduction of aerodynamic cross coupling effects by optimization, Postgraduate, E.USTA(Student), 2015

TUNCER İ. H., Development of an all speed navier-stokes preconditioner for two and three dimensional flows on hybrid grids, Doctorate, O.BAŞ(Student), 2015

TUNCER İ. H., UZOL O., Experimental and numerical investigation of pressure swirl atomizers, Doctorate, B.SÜMER(Student), 2014

TUNCER İ. H., Implementation of K-epsilon turbulence models in a two dimensional parallel Navier-Stokes solver on hybrid grids, Postgraduate, O.OZAN(Student), 2014

TUNCER İ. H., Roll characteristics and shape optimization of the free-to-rotate tail-fins on a canard-controlled missile, Postgraduate, E.FEYZİOĞLU(Student), 2014

TUNCER İ. H., Micro-siting of wind turbines using Navier-Stokes solutions coupled with a numerical weather prediction model, Doctorate, G.AHMET(Student), 2014

TUNCER İ. H., UZOL O., Detached eddy simulation of turbulent flow on 2D hybrid grids, Postgraduate, Ö.YIRTICI(Student),

TUNCER İ. H., Terrain modeling and atmospheric turbulent flow solutions based on meteorological weather forecast data, Postgraduate, E.LEBLEBİCİ(Student), 2012

TUNCER İ. H., Implementation of turbulence models on 2d hybrid grids using an explicit/implicit multigrid algorithm, Postgraduate, A.EMRE(Student), 2011

TUNCER İ. H., SEZER UZOL N., Genetic algorithm based aerodynamic shape optimization of wind turbine rotor blades using a 2-d panel method with a boundary layer solver, Postgraduate, Ö.POLAT(Student), 2011

TUNCER İ. H., Path optimization of flapping airfoils based on unsteady viscous flow solutions, Doctorate,

M.KAYA(Student), 2008

TUNCER İ. H., Active flow control studies over an elliptical profile, Postgraduate, E.Erler (Student), 2008

TUNCER İ. H., Numerical investigation of flow control over an airfoil with synthetic jets and its optimization,

Postgraduate, E.Akçayöz(Student), 2008

TUNCER İ. H., SELÇUK N., A non-iterative pressure based algorithm for the computation of reacting radiating flows, Doctorate, A.BİLGE(Student), 2007

TUNCER İ. H., Development of an incompressible Navier-Stokes solver with alternating cell direction implicit method on structured and unstructured quadrilateral grids, Postgraduate, O.BAŞ(Student), 2007

TUNCER İ. H., Gas-kinetic methods for 3-D inviscid and viscous flow solutions on unstructured/hybrid grids, Doctorate, M.ILGAZ(Student), 2007

TUNCER İ. H., Numerical and experimental investigation of flow through a cavitating venturi, Postgraduate, B.YAZICI(Student), 2006

 $TUNCER\ i.\ H.,\ Computation\ of\ viscous\ flows\ over\ flapping\ airfoils\ and\ parallel\ optimization\ of\ flapping\ parameters,$

Postgraduate, M.KAYA(Student), 2003

TUNCER İ. H., Tuncer İ., Finite volume solutions of 1D Euler equations for high spped flows with finite-rare chemistry, Postgraduate, B.Erdem(Student), 2003

TUNCER İ. H., Application of turbulence models to unsteady cascade flows in a parallel environment, Postgraduate, N.AÇIKGÖZ(Student), 2001

SELÇUK N., TUNCER İ. H., Parallelization of a transient Navier-Stokes code based on method of lines solution, Postgraduate, C.ERŞAHİN(Student), 2001

Published journal articles indexed by SCI, SSCI, and AHCI

I. Adjoint based aerodynamic shape optimization of a semi-submerged inlet duct and upstream inlet surface

Küçük U. C., Tuncer I. H.

Optimization and Engineering, 2024 (SCI-Expanded)

II. Discrete Adjoint-Based Aerodynamic Shape Optimization Framework for Natural Laminar Flows Kaya H., TUNCER İ. H.

AIAA Journal, vol.60, no.1, pp.197-212, 2022 (SCI-Expanded)

III. Aerodynamic shape optimization of wind turbine blades for minimizing power production losses due to icing

Yirtici O., TUNCER İ. H.

COLD REGIONS SCIENCE AND TECHNOLOGY, vol.185, 2021 (SCI-Expanded)

IV. Investigation of wind turbine wakes and wake recovery in a tandem configuration using actuator line model with LES

ÖNEL H. C., TUNCER İ. H.

Computers and Fluids, vol.220, 2021 (SCI-Expanded)

V. Numerical investigation of vortical flows over a close-coupled delta canard-wing configuration Yutuk K., Tikenogullari A., TUNCER İ. H.

COMPUTERS & FLUIDS, vol.216, 2021 (SCI-Expanded)

VI. A comparative study of wake interactions between wind-aligned and yawed wind turbines using LES

and actuator line models

ÖNEL H. C., TUNCER İ. H.

Journal of Physics: Conference Series, vol.1618, 2020 (SCI-Expanded)

VII. Aerodynamic validation studies on the performance analysis of iced wind turbine blades

YIRTICI Ö., Cengiz K., ÖZGEN S., TUNCER İ. H.

COMPUTERS & FLUIDS, vol.192, 2019 (SCI-Expanded)

VIII. Predictions of ice formations on wind turbine blades and power production losses due to icing

YIRTICI Ö., ÖZGEN S., TUNCER İ. H.

WIND ENERGY, vol.22, no.7, pp.945-958, 2019 (SCI-Expanded)

IX. A Novel Alternating Cell Directions Implicit Method for the Solution of Incompressible Navier Stokes Equations on Unstructured Grids

Bas O., ÇETE A. R., Mengi S., TUNCER İ. H., Kaynak U.

JOURNAL OF APPLIED FLUID MECHANICS, vol.10, no.6, pp.1561-1570, 2017 (SCI-Expanded)

X. A Mach-uniform preconditioner for incompressible and subsonic flows

Bas O., TUNCER İ. H., Kaynak U.

INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.74, no.2, pp.100-112, 2014 (SCI-Expanded)

XI. Optimization of Flapping Motion Parameters for Two Airfoils in a Biplane Configuration

Kaya M., TUNCER İ. H., Jones K. D., Platzer M. F.

JOURNAL OF AIRCRAFT, vol.46, no.2, pp.583-592, 2009 (SCI-Expanded)

XII. A parallel gas-kinetic Bhatnagar-Gross-Krook method for the solution of viscous flows on twodimensional hybrid grids

Ilgaz M., TUNCER İ. H.

INTERNATIONAL JOURNAL OF COMPUTATIONAL FLUID DYNAMICS, vol.23, no.10, pp.699-711, 2009 (SCI-Expanded)

XIII. A non-iterative pressure based scheme for the computation of reacting radiating flows

Uygur A. B., SELÇUK N., TUNCER İ. H.

INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.47, no.3, pp.209-220, 2008 (SCI-Expanded)

XIV. Nonsinusoidal path optimization of a flapping airfoil

Kaya M., Tuncer I. H.

AIAA JOURNAL, vol.45, no.8, pp.2075-2082, 2007 (SCI-Expanded)

XV. Optimization of flapping airfoils for maximum thrust and propulsive efficiency

Tuncer I., Kaya M.

AIAA JOURNAL, vol.43, no.11, pp.2329-2336, 2005 (SCI-Expanded)

XVI. Viscous flow solutions over CN-235 cargo aircraft

Uygun M., Tuncer I.

JOURNAL OF AIRCRAFT, vol.41, no.4, pp.940-944, 2004 (SCI-Expanded)

XVII. Parallelization of a transient method of lines Navier-Stokes code

Ersahin C., Tarhan T., Tuncer I., Selcuk N.

INTERNATIONAL JOURNAL OF COMPUTATIONAL FLUID DYNAMICS, vol.18, no.1, pp.81-92, 2004 (SCI-Expanded)

XVIII. Thrust generation caused by flapping airfoils in a biplane configuration

Tuncer I., Kaya M.

JOURNAL OF AIRCRAFT, vol.40, no.3, pp.509-515, 2003 (SCI-Expanded)

XIX. Computational investigation of flow through a louvered inlet configuration

Tuncer I., Platzer M.

JOURNAL OF AIRCRAFT, vol.39, no.5, pp.903-906, 2002 (SCI-Expanded)

XX. Computational study of flapping airfoil aerodynamics

Tuncer I., Platzer M.

JOURNAL OF AIRCRAFT, vol.37, no.3, pp.514-520, 2000 (SCI-Expanded)

XXI. Investigation of periodic boundary conditions in multipassage cascade flows using overset grids

Tuncer İ. H., Weber S., Sanz W.

JOURNAL OF TURBOMACHINERY-TRANSACTIONS OF THE ASME, vol.121, no.2, pp.341-347, 1999 (SCI-Expanded)

XXII. Computational study of subsonic flow over a delta canard-wing-body configuration

Tuncer İ. H., Platzer M.

JOURNAL OF AIRCRAFT, vol.35, no.4, pp.554-560, 1998 (SCI-Expanded)

XXIII. Potential flow solutions with wakes over an ogive cylinder

Tuncer İ. H., Platzer M.

JOURNAL OF SPACECRAFT AND ROCKETS, vol.35, no.3, pp.273-277, 1998 (SCI-Expanded)

XXIV. Navier-Stokes analysis of subsonic flowfields over a missile configuration

Tuncer İ. H., Platzer M., VanDyken R.

JOURNAL OF SPACECRAFT AND ROCKETS, vol.35, no.2, pp.127-131, 1998 (SCI-Expanded)

XXV. Two-dimensional unsteady Navier-Stokes solution method with moving overset grids

Tuncer İ. H.

AIAA JOURNAL, vol.35, no.3, pp.471-476, 1997 (SCI-Expanded)

XXVI. Thrust generation due to airfoil flapping

Tuncer İ. H., Platzer M.

AIAA JOURNAL, vol.34, no.2, pp.324-331, 1996 (SCI-Expanded)

XXVII. Viscous-inviscid interaction method for unsteady low-speed airfoil flows

Tuncer İ. H., Ekaterinaris J. A., Platzer M. F.

AIAA Journal, vol.33, no.1, pp.151-153, 1995 (SCI-Expanded)

XXVIII. UNSTEADY AERODYNAMIC CHARACTERISTICS OF A DUAL-ELEMENT AIRFOIL

TUNCER İ. H., SANKAR L.

JOURNAL OF AIRCRAFT, vol.31, no.3, pp.531-537, 1994 (SCI-Expanded)

XXIX. NUMERICAL-SIMULATION OF 3-DIMENSIONAL SUPERSONIC FREE SHEAR LAYERS

TUNCER İ. H., SANKAR L.

AIAA JOURNAL, vol.30, no.4, pp.871-872, 1992 (SCI-Expanded)

XXX. THEORETICAL AND NUMERICAL-STUDIES OF OSCILLATING AIRFOILS

TUNCER İ. H., WU J., WANG C.

AIAA JOURNAL, vol.28, no.9, pp.1615-1624, 1990 (SCI-Expanded)

Articles Published in Other Journals

I. Parallel processing of two-dimensional euler equations for compressible flows

Doğru K., Aksel M., TUNCER İ. H.

Modelling, Measurement and Control B, vol.77, pp.50-70, 2008 (Scopus)

Books & Book Chapters

I. Transition Modeling for Low to High Speed Boundary Layer Flows with CFD Applications

TUNCER İ. H., BAŞ O., KAYNAK Ü., Çakmakcıoğlu S. C.

in: Boundary Layer Flows - Theory, Applications and Numerical Methods, Vallampati Ramachandra Prasad, Editor, IntechOpen, London, pp.1-21, 2020

II. Non-sinusoidal Path Optimization of Flapping Airfoils in Biplane Configuration,

KAYA M., TUNCER İ. H.

in: Lecture Notes in Computational Science and Engineering, Ismail H. Tuncer, Ulgen Gulcat, David Emerson,

Kenichi Matsuno, Editor, Springer, Berlin, pp.59-66, 2009

Refereed Congress / Symposium Publications in Proceedings

I. ADJOINT-BASED SHAPE OPTIMIZATION FOR A SEMI-SUBMERGED ENGINE INLET

Küçük U. C., Tuncer I. H.

12th Ankara International Aerospace Conference, Ankara, Turkey, 13 - 15 September 2023, no.12, pp.1-8

II. ESTIMATION OF WAKE INDUCED POWER LOSSES IN A LARGE OFFSHORE WIND FARM USING ACTUATOR DISK AND LES MODELS

Önel H. C., Tuncer I. H.

12th Ankara International Aerospace Conference, Ankara, Turkey, 13 - 15 September 2023, no.12, pp.1-14

III. Short-Term Numerical Forecasting of Near-Ground Wind Fields Using OpenFOAM Coupled With WRF Onel H. C., Tuncer I. H.

AIAA SCITECH 2023 Forum, Maryland, United States Of America, 23 - 27 January 2023, pp.1-12

IV. Adjoint Based Shape Optimization of an S-Shaped Duct with SU2

Kucuk U. C., TUNCER İ. H.

AIAA Science and Technology Forum and Exposition, AIAA SciTech Forum 2022, California, United States Of America, 3 - 07 January 2022

V. Adjoint based design optimization of subsonic airfoils using a panel code together with a rans solver Sarikaya B., TUNCER İ. H.

AIAA Science and Technology Forum and Exposition, AIAA SciTech Forum 2022, California, United States Of America, 3 - 07 January 2022

VI. Adjoint Based Multi-Objective Optimization of Submerged Subsonic Intake

Ahmed A., TUNCER İ. H.

18th International Bhurban Conference on Applied Sciences and Technologies, IBCAST 2021, Virtual, Islamabad, Pakistan, 12 - 16 January 2021, pp.788-795

VII. FOREBODY OPTIMIZATION USING RESPONSE SURFACE METHODOLOGY WITH GENETIC ALGORITHM Kandemir O., TUNCER İ. H.

ASME 2021 International Mechanical Engineering Congress and Exposition, IMECE 2021, Virtual, Online, 1 - 05 November 2021, vol.6

VIII. Wing Planform Optimization Using Flow Solutions and Response Surface Methodology Yildirim B. Y., TUNCER İ. H.

AIAA Aviation and Aeronautics Forum and Exposition, AIAA AVIATION Forum 2021, Virtual, Online, 2 - 06 August 2021

IX. Estimation of Wake Induced Power Loss in Wind Turbines Using Actuator Line Model ÖNEL H. C., TUNCER İ. H.

AIAA AVIATION 2020 FORUM, Nevada, United States Of America, 15 - 19 June 2020

X. Aerodynamic Performance Analyses of Iced Wind Turbine Blade Profile with Transitional DDES YALÇIN Ö., YIRTICI Ö., ÖZYÖRÜK Y., TUNCER İ. H.

10th Ankara International Aerospace Conference, 18 - 20 September 2019

XI. OPENFOAM SIMULATION OF DUAL IN-LINE WIND TURBINES BASED ON ACTUATOR LINE ÖNEL H. C., TUNCER İ. H.

10th ANKARA INTERNATIONAL AEROSPACE CONFERENCE, 18 - 20 September 2019

XII. DEVELOPMENT OF A 2D DISCRETE TURBULENT ADJOINT SOLVER USING AUTOMATIC DIFFERENTIATION

Kaya H., TUNCER İ. H., Tiftikci H.

10th ANKARA INTERNATIONAL AEROSPACE CONFERENCE, 18 - 20 September 2019

XIII. DESIGN OPTIMIZATION OF A 2-D SCRAMJET INLET

başaran M., LEBLEBİCİ E., TUNCER İ. H.

31st International Conference on Parallel Computational Fluid Dynamics, 14 - 17 May 2019

XIV. WIND FIELD SIMULATION IN A WIND FARM USING OPENFOAM AND ACTUATOR LINE MODEL ÖNEL H. C., TUNCER İ. H.

31. International Conference on Parallel Computational Fluid Dynamics, 14 - 17 May 2019

XV. Aerodynamic Shape Optimization for Reducing Ice Induced Losses on Wind Turbine Blades YIRTICI Ö., TUNCER İ. H.

31st International Conference on Parallel Computational Fluid Dynamics, 14 - 17 May 2019

XVI. Buzlanmış Rüzgar Türbini Palasında Performans Kayıp Analizi

YIRTICI Ö., ÖZGEN S., TUNCER İ. H.

7. Ulusal Havacılık ve Uzay Konferansı, Samsun, Turkey, 12 - 14 September 2018

XVII. AKTÜATÖR ÇİZGİ METODU İLE BİR RÜZGAR TÜRBİNİNİN MODELLENMESİ VE HESAPLAMALI AKIŞ ÇÖZÜMÜ SONUÇLARININ DOĞRULANMASI

Tuncer İ. H., Önel H. C.

7. Ulusal Havacılık ve Uzay Konferansı, Samsun, Turkey, 12 - 14 September 2018, pp.0-8

XVIII. OTOMATİK TÜREV ARAÇLARI İLE AYRIK ADJOINT ÇÖZÜCÜ GELİŞTİRİLMESİ

Tuncer İ. H., Kaya H., Tiftikci H.

7. Havacılık ve Uzay Konferansı, Samsun, Turkey, 12 - 14 September 2018, pp.1-12

XIX. Wind Turbine Performance Losses Due to the Ice Accretion on the Turbine Blades

YIRTICI Ö., SEVİNE T., ÖZGEN S., TUNCER İ. H.

AIAA 2018 Joint Thermophysics and Heat Transfer Conference, Atlanta, United States Of America, 25 - 29 June 2018

XX. Aerodynamic Shape Optimization of Wind Turbine Blades for Reducing Icing Related Power Losses YIRTICI Ö., ÖZGEN S., TUNCER İ. H.

26th Annual Conference of the CFD Society of Canada, Winnipeg, Canada, 10 - 12 June 2018

XXI. Performance Degradation Analysis of an Iced TurbineBlade by Using Detached-Eddy Simulation YIRTICI Ö., Cengiz K., TUNCER İ. H.

Parallel CFD 2018, Indianapolis, United States Of America, 14 - 17 May 2018

XXII. WIND POTENTIAL/POWER ESTIMATION BASED ON UNSTEADY OpenFOAM SOLUTIONS COUPLED WITH WRF

TUNCER İ. H.

15th International Bhurban Conference on Applied Sciences Technology - IBCAST, Islamabad, Pakistan, 9 - 12 January 2018

XXIII. GRADIENT BASED AERODYNAMIC SHAPE OPTIMIZATION

TUNCER İ. H.

15th International Bhurban Conference on Applied Sciences Technology - IBCAST, Islamabad, Pakistan, 9 - 12 January 2018

XXIV. The Effect of Static Stability on the Short Range FlightTrajectory of a Countermunition

Bent M., Dikbaş E., Tuncer İ. H.

2018 AIAA Atmospheric Flight Mechanics Conference, Florida, United States Of America, 8 - 12 January 2018

XXV. Wind turbine power production losses due to ice accretion on turbine blades

Yirtici O., Sevine T., ÖZGEN S., TUNCER İ. H.

12th AIAA/ASME Joint Thermophysics and Heat Transfer Conference, 2018, [state] GA, United States Of America, 25 - 29 June 2018

XXVI. Coupling of a multibody simulation tool for rotary systems with an unsteady viscous flow solver Soğancı S., KAYRAN A., TUNCER İ. H.

AIAA Aerospace Sciences Meeting, 2018, Florida, United States Of America, 8 - 12 January 2018

XXVII. ICING ON WIND TURBINE BLADE UNDER VARIOUS ATMOSPHERIC CONDITIONS

YIRTICI Ö., ÖZGEN S., TUNCER İ. H.

9th Ankara International Aerospace Conference, Ankara, Turkey, 20 - 22 September 2017

XXVIII. RECONSTRUCTION OF WINDSIM FLOWFIELDS BASED ON PROPER ORTHOGONAL DECOMPOSITION METHOD

SEVINE T., TUNCER İ. H.

9th Ankara International Aerospace Conference, Ankara, Turkey, 20 - 22 September 2017

XXIX. Reconstruction of Atmospheric Flow Field and Wind Resource Estimation based on Proper Orthogonal Decomposition Method

SEVÎNE T., LEBLEBÎCÎ E., KAYA M., TUNCER Î. H.

Wind Energy Science Conference, Lyngby, Denmark, 26 - 29 June 2017

XXX. Validation of Parallel WRF Downscaling Methodology using OpenFOAM

LEBLEBİCİ E., TUNCER İ. H.

Wind Energy Science COnference 2017, Lyngby, Denmark, 26 - 29 June 2017

 ${\it XXXI.} \quad {\it OpenFOAM Solutions Coupled with WRF for Wind Power Estimation}$

LEBLEBICI E., TUNCER İ. H.

AIAA Aviation Forum, Denver, United States Of America, 5 - 09 June 2017

XXXII. Parallel OpenFOAM - WRF Coupling Methodologyand Comparison with Wind Mast Data

LEBLEBICI E., TUNCER İ. H.

5th Symposium on OpenFOAM in Wind Energy, Pamplona, Spain, 26 - 28 April 2017

XXXIII. Aerodynamic Shape Optimization of Wind TurbineBlades for Reducing Power Production Losses due to Ice Accretion

YIRTICI Ö., TUNCER İ. H., ÖZGEN S.

AIAA Scitech Conference, Dallas, United States Of America, 9 - 13 January 2017

XXXIV. Ice Accretion Prediction on Wind Turbines and Consequent Power Losses

YIRTICI Ö., TUNCER İ. H., ÖZGEN S.

Conference on Science of Making Torque from Wind (TORQUE), Munich, Germany, 5 - 07 October 2016, vol.753

XXXV. SES-ÜSTÜ KANARD KONTROLLÜ FÜZELER İÇİN SERBEST DÖNEN KUYRUĞUN ŞEKİL OPTİMİZASYONU Feyzioğlu E., TUNCER İ. H.

6. Ulusal Havacılık ve Uzay Konferansı, Turkey, 28 - 30 September 2016

XXXVI. HELİKOPTER PALLERİNİN ÇOKLU KÜTLELİ BENZETİM ARACI VE İKİ BOYUTLU PANEL TABANLI AKIŞ ÇÖZÜCÜSÜ İLE ETKİLEŞİMLİ ANALİZİ

Soğancı S., KAYRAN A., TUNCER İ. H.

6. Ulusal Havacılık ve Uzay Konferansı, Kocaeli, Turkey, 28 - 30 September 2016

XXXVII. OPENFOAM'UN WRF İLE AKUPLE EDİLMESİ VE RÜZGAR POTANSİYELİ TAHMİNİ

LEBLEBİCİ E., TUNCER İ. H.

6. Ulusal Havacılık ve Uzay Konferansı, Kocaeli, Turkey, 28 - 30 September 2016

XXXVIII. ATMOSFERİK AKIŞLARIN NÜMERİK ÇÖZÜMÜ VE POD YÖNTEMİYLE YENİDEN OLUŞTURULMASI SEVİNE T., LEBLEBİCİ E., KAYA M., TUNCER İ. H.

6. Ulusal Havacılık ve Uzay Konferansı, Kocaeli, Turkey, 28 - 30 September 2016

XXXIX. RANS VE PAL ELEMANLARI YÖNTEMİ İLE YATAY EKSENLİ RÜZGAR TÜRBİNİ PERFORMANS ANALİZİ YIRTICI Ö., TUNCER İ. H.

6. Ulusal Havacılık ve Uzay Konferansı, Kocaeli, Turkey, 28 - 30 September 2016

XL. Development of OpenFOAM - WRF Coupling Methodolgy for Wind Power Production Estimations LEBLEBİCİ E., TUNCER İ. H.

SOWE 2016 The Fourth Symposium on OpenFOAM in Wind Energy, Delft, Netherlands, 2 - 05 May 2016

XLI. Ice Accretion Prediction on Wind Turbine Blades Under Atmospheric Icing Conditions Yırtıcı Ö., ÖZGEN S., TUNCER İ. H.

11. EAWE PhD Seminar on Wing Energy in Europe, Stuttgart, Germany, 23 - 25 September 2015

XLII. AERODYNAMIC SHAPE OPTIMIZATION OF WIND TURBINE BLADES BASED ON BEM METHODOLOGY AND GENETIC ALGORITHM

TUNCER İ. H.

IBCAST 2016 - 13th International Bhurban Conference on Applied Sciences and Technology, Islamabad, Pakistan, 12 - 16 January 2016

XLIII. MICRO-SCALE ATMOSPHERIC FLOW SOLUTIONS COUPLED WITH A MESO-SCALE WEATHER PREDICTION MODEL

TUNCER İ. H.

IBCAST 2016 - 13th International Bhurban Conference on Applied Sciences and Technology, Islamabad, Pakistan, 12 - 16 January 2016

XLIV. Wind Power Estimations using OpenFOAM Coupled with WRF

LEBLEBİCİ E., TUNCER İ. H.

11th EAWE PhD Seminar on Wind Energy in Europe, 23 - 25 September 2015

XLV. ICE ACCRETION PREDICTION ON HORIZONTAL AXIS WIND TURBINE BLADES

YIRTICI Ö., ÖZGEN S., TUNCER İ. H.

EAWE 2015, 22 - 25 September 2015

XLVI. FLUID STRUCTURE INTERACTION BASED ON PANEL METHOD AND GEOMETRICALLY NONLINEAR STRUCTURAL ANALYSIS

Sedat Ö., KAYRAN A., TUNCER İ. H.

Ankara International Aerospace COnference, 10 - 12 September 2015

XLVII. MODELING OF STORE SEPARATION BEHAVIOR BASED ON A NEURAL NETWORK AND UNSTEADY FLOW SOLUTIONS

Erinç E., TUNCER İ. H.

Ankara International Aerospace Conference, 10 - 12 September 2015

XLVIII. AERODYNAMIC DESIGN ANALYSIS OF MISSILES WITH STRAKE CONFIGURATIONS AT SUPERSONIC MACH NUMBERS

Usta E., Kıvanç A., TUNCER İ. H.

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Supported Projects

Tuncer I. H., Company, Kanard/Kanat Konfigürasyonu için Adjoint tabanlı Aerodinamik Tasarım Optimizasyonu, 2018 - 2020

Tuncer I. H., Project Supported by Defense Industry, Dış Geometri Aerodinamik Optimizasyonu Yazılım Aracı Geliştirilmesi, 2016 - 2020

TUNCER İ. H., TÜBİTAK International Multi-Cooperation Project, Orta (Meso) Ölçekli Bir Hava Tahmini Yazılımıyla Akuple Edilmiş Mikro Ölçekli Atmosferik Akışın Modellenmesi, 2015 - 2018

Tuncer I. H., TUBITAK Project, RÜZGAR TÜRBİNLERİNİN MİKRO DÜZEYDEKİ YER SEÇİMİ İÇİN NAVIER STOKES AKIŞ ÇÖZÜCÜSÜNÜNTOPOĞRAFİK YAPISIZ ÇÖZÜM AĞLARINDA GELİŞTİRİLMESİ VE KULLANILMASI, 2012 - 2015 TUNCER İ. H., TUBITAK Project, Rüzgar Türbinlerinin Mikro Düzeydeki Yer Seçimi İçin Navier-Stokes Akış Çözücüsünün Topoğrafik Yapısız Çözüm Ağlarında Geliştirilmesi ve Kullanılması, 2012 - 2015

Activities in Scientific Journals

COMPUTERS AND FLUIDS, Special Issue Editor, 2019 - 2021

Scientific Refereeing

INTERNATIONAL JOURNAL OF AEROSPACE ENGINEERING, Journal Indexed in SCI-E, August 2019 COMPUTERS & FLUIDS, SCI Journal, June 2019

IEEE ACCESS, SCI Journal, June 2019

Ankara International Aerospace Conference, Conference Paper (Abstract), June 2019

TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Middle East Technical University, Turkey, June 2019

COMPUTERS & FLUIDS, SCI Journal, April 2019

COMPUTERS & FLUIDS, SCI Journal, January 2019

16th IBCAST, Conference Paper (Full Text), November 2018

APPLIED BIONICS AND BIOMECHANICS, SCI Journal, August 2018

TUBITAK Project, 1512 - Progressive Support Program for Entrepreneurship, UP ROBOTİK L.Ş., Turkey, July 2018 AEROSPACE SCIENCE AND TECHNOLOGY, SCI Journal, June 2018

GAZİ ÜNİVERSİTESİ MÜHENDİSLİK MİMARLIK FAKÜLTESİ DERGİSİ, National Scientific Refreed Journal, March 2018 Wind Energy Science, Other Indexed Journal, February 2018

Scientific Consultations

TUSAŞ A.Ş., Scientific Consultancy, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, Turkey, 2018 - Continues

TUSAŞ A.Ş., Scientific Consultancy, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, Turkey, 2018 - 2020

Tasks In Event Organizations

Tuncer İ. H., Yaman Y., Kayran A., Uzol O., Gürses E., Perçin M., 10th Ankara International Aerospace Conference (AIAC2019), Scientific Congress, Ankara, Turkey, Eylül 2019

Tuncer İ. H., 31st International Conference on Parallel Computational Fluid Dynamics, Scientific Congress, Antalya, Turkey, Mayıs 2019

Mısırlıoğlu A., Tuncer İ. H., Yükselen A., 7. Ulusak Havacılık ve Uzay Konferansı, Scientific Congress, Samsun, Turkey, Eylül 2018

Mobility Activity

Erasmus Programme, Lecturing, Grand Valley State University, United States Of America, 2018 - 2018 Erasmus Programme, Lecturing, Technicsche Universitaet Graz, Austria, 2018 - 2018

Metrics

Publication: 135 Citation (WoS): 527 Citation (Scopus): 1080 H-Index (WoS): 10 H-Index (Scopus): 16

Congress and Symposium Activities

AIAA 2018 Joint Thermophysics and Heat Transfer Conference, Working Group, Georgia, United States Of America, 2018 30th International Conference on Parallel Computational Fluid Dynamics, Working Group, Indiana, United States Of America, 2018

15th International Bhurban Conference on Applied Sciences & Technology - IBCAST, Invited Speaker, Islamabad, Pakistan, 2018

Invited Talks

KSCFE 25th Conference, Conference, Korean Society for Computational Fluid Engineering, South Korea, October 2020

Non Academic Experience

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