

## Ahmet Ozbay

**Email:** Ahmet.Ozbay@ucf.edu

**Phone:** 5154514945

### EDUCATION

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- May 2012 – December 2014      **Iowa State University, Ames, IA – USA**  
**Ph.D.** in Aerospace Engineering  
**Dissertation title:** An experimental investigation on wind turbine aeromechanics and wake interferences among multiple wind turbines  
Total cumulative GPA: 3.63/4.0
- August 2009 – May 2012      **Iowa State University, Ames, IA – USA**  
**M.S.** in Aerospace Engineering  
**Thesis title:** Experimental investigations on the wake interferences of multiple wind turbines  
Total cumulative GPA: 3.33/4.0
- September 2003 – June 2009      **Middle East Technical University, Ankara – TURKEY**  
**Double major (B.S.) in Mechanical Engineering**  
Total cumulative GPA: 3.20/4.0
- September 2003 – June 2008      **Middle East Technical University, Ankara – TURKEY**  
**Bachelor of Science (B.S.) in Aerospace Engineering**  
Total cumulative GPA: 3.12/4.0

### PROFESSIONAL TRAININGS

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- 2011 Fall      Wind Engineering Research Training (Wind Turbine Aerodynamics)
- 2009 Fall      Iowa State University Graduate Teaching Assistantship and Research Assistantship Training

### AWARDS & HONORS

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- 2013 Spring      **Best Poster Award** of 2013 Iowa Wind Energy Association (IWEA) Conference
- 2009      **Fulbright Fellowship** Award (nominated)
- 2004 – 2009      **Honor & High Honor** Awards, Aerospace and Mechanical Engineering, Middle East Technical University, Turkey
- 2003      Ranked **in the top 0.5%** among high school students taking *University Entrance Examination* in Turkey

## PROFESSIONAL EXPERIENCE

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2014 - Present

Teaching Professor at University of Central Florida

- Teaching variety of undergraduate and graduate classes including **Fluid mechanics, Aerodynamics, Design of Aerospace experiments, Satellite payload and integration, Space systems, Rocket propulsion, Intermediate Aerodynamics, Advanced gas dynamics, and Thermodynamics**
- Mentoring senior design and undergraduate students on various design phases of UAVs and Hybrid Rockets
- Incorporating the use of various softwares in projects; aerodynamic performance of different airfoils using XFOIL and XFLR5, implementation of 2D panel methods, external (subsonic and supersonic) flow analysis over aerodynamic and bluff bodies using FLUENT, simulation of shock waves around a supercritical airfoil, supersonic nozzle simulation for rocket nozzles for under-expanded and over-expanded flow conditions, satellite design and mission analysis using STK, simulation of supersonic and subsonic wind tunnels, boundary layer analysis over a flat plate, etc..

2009 – 2014

**Iowa State University, Dept. of Aerospace Engineering**

Graduate Research Assistant at Advanced Flow Diagnostics and Experimental Aerodynamics Laboratory

- Conducting aerodynamic and boundary layer experiments in a closed-circuit low speed wind tunnel
- Use of Laser based experimental measurement techniques such as Particle Image Velocimetry (PIV) for the wake flow measurement and for the visualization of unsteady vortex shedding
- Use of intrusive and non-intrusive techniques for pressure and velocity measurements
- Wind turbine aerodynamics, wake interference in wind farms and effect of incoming flow character on wind farm performance

2012 - 2014

**Iowa State University, Dept. of Aerospace Engineering**

PhD Courses:

- Incompressible Flow Aerodynamics / A
- Advanced Experimental Techniques for Thermal-Fluid Studies / A
- Wind Engineering / A
- Special Topics on Wind Energy Science / A

## PUBLICATIONS/CONFERENCE PAPERS

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[https://scholar.google.com/citations?hl=en&user=IXerSM0AAAAJ&view\\_op=list\\_works&sortby=pubdate](https://scholar.google.com/citations?hl=en&user=IXerSM0AAAAJ&view_op=list_works&sortby=pubdate)

## CERTIFICATES

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2013 Spring	Iowa Wind Energy Association Poster Award Certificate
2011 Fall	Wind Engineering Research Training (Wind Turbine Aerodynamics) Certificate
2009 Fall	Iowa State University Graduate Teaching Assistantship and Research Assistantship Training Certificate

## PROFESSIONAL AFFILIATIONS

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2011 – Present	American Society of Mechanical Engineers (ASME)
2011 – Present	Iowa Wind Energy Association (IWEA)
2010 – Present	American Institute of Aeronautics and Astronautics (AIAA)

## SKILLS

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**Programming and Software:** Matlab, Fortran, C++, Tecplot, AutoCAD, LabVIEW, Fluent, STK, SolidWorks

**Experimental Techniques:** Wind tunnel testing and instrumentation (velocity probes, pressure and force sensors) and Laser-based flow field measurement techniques (PIV)

**Languages:** Turkish (Native), Fluent in English.

## EXTRACURRICULAR ACTIVITIES

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2014 – 2015	University of Central Florida, Projecto 100,000 Onsite Coordinator
2010– 2014	Turkish Student Association (TSA) at ISU Executive Board Member
2009 – 2010	Turkish Student Association (TSA) at ISU President

## REFERENCES

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- Hui Hu, Ph.D. Iowa State University  
Professor, Department of Aerospace Engineering  
Director of Advanced Flow Diagnostics and Experimental Aerodynamics  
Laboratory  
Email: [huhui@iastate.edu](mailto:huhui@iastate.edu)
- Partha P. Sarkar, Ph.D. Iowa State University  
Professor, Department of Aerospace Engineering  
Director of Wind Simulation and Testing (WIST) Laboratory  
Email: [ppsarkar@iastate.edu](mailto:ppsarkar@iastate.edu)
- Eugene S. Takle, Ph.D. Iowa State University  
Professor, Department of Atmospheric Science and Agricultural  
Meteorology  
Email: [gstakle@iastate.edu](mailto:gstakle@iastate.edu)