

**Ahmad Vasel-Be-Hagh**

Assistant Professor of Mechanical Engineering

Tennessee Technological University

+1-931-372-6468 | [avaselbehagh@tntech.edu](mailto:avaselbehagh@tntech.edu) | <https://sites.tntech.edu/fmrl/>**EDUCATION**

Postdoc	Ocean Engineering	University of Delaware	US	2015-2017
Ph.D.	Mechanical Engineering	University of Windsor	Canada	2011-2015
M.Sc.	Mechanical Engineering	Ferdowsi University	Iran	2008-2011
B.Sc.	Mechanical Engineering	Ferdowsi University	Iran	2004-2008

**PROFESSIONAL APPOINTMENTS**

2017 –	Assistant Professor	Mechanical Engineering	Tennessee Tech University
2022	Adjunct Faculty <sup>1</sup>	Mechanical Engineering	East Tennessee State University
2019 – 2020	Adjunct Faculty	Mechanical Engineering	East Tennessee State University

**GRANTS AWARDED**

Total: \$6,083,100

Contribution: 25%

Share: \$1,444,208

**PI Total: \$1,290,163.00**

2023	\$277,975	Tennessee Valley Authority (TVA)	High-Precision Heat Delivery to Partly Melt Inaccessible Ice at a Nuclear Plant's Condenser
2022-27	\$500,493	National Science Foundation (NSF)	NSF CAREER: CAS-Climate: Understanding Thermal Transport Processes in Atmospheric Boundary Layer with Utility-Scale Solar Photovoltaic Plants
2022-23	\$250,000	Tennessee Valley Authority (TVA)	Thermal Treatment of Nuclear Plants' Ice Condensers using CO2 Lasers
2021-22	\$11,000	College of Engineering, Tennessee Tech	Developing an Experimental Setup to Demonstrate the First and Second Laws of Thermodynamics
2020-21	\$10,000	Research Office Tennessee Tech	Faculty Research Award: Understanding and Modeling of Thermal Transport Processes within Near-Ground Atmosphere in the Presence of Utility-Scale Solar

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<sup>1</sup> Taught online courses simultaneously with my Tennessee Tech lectures

2020-21	\$185,000	Tennessee Valley Authority (TVA)	Development of a Laser-Based System for the Maintenance of Ice Condensers
2019-20	\$10,619	HKF Technologies LLC	Application of Artificial Intelligence for Air Pollution Monitoring and Remediation using Neural Networks and Deep Learning
2016	\$45,076	First State Marine Wind LLC	Investigating the Impact of Wind Turbines on Surface Fluxes using Computational Fluid Dynamics

**Co-PI and Senior Personnel (Total: \$4,792,937, My share: \$154,045)**

2019–20	\$186,244 (Share: \$20,715)	U.S. Department of Interior	Advanced Wake Loss Modeling for Large Wind Farms with Variable Wind Speed and Direction
2023–27	\$4,531,642 (Share: \$131,079)	U.S. Department of Energy	Second-life Battery in Mobile EV Charging Application for Rural Transportation (SMART)
2021–22	\$75,051 (Share: \$2,251)	Visionary Fiber Technologies	Fiber Reactor Extraction Simulation

**MAJOR GRANTS PENDING**

2023–27	\$8,541,725 (Share: \$907,637)	NASA	CarbonLess Electric Aviation (CLEAN)
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**SELECTED AWARDS, HONORS**

2022	Wings Up 100, Tennessee Tech University
2021	Distinguished Researcher, ASME Student Chapter at Tennessee Tech University
2021	Wings Up 100, Tennessee Tech University
2020	Outstanding Advisor, ASME Student Chapter at Tennessee Tech University
2016	T&E Theorist, Turbulence and Energy Laboratory, University of Windsor
2015	Mitacs-Accelerate Internship Award (\$21,000), Mitacs, Canada
2015	Innovative Researcher, Turbulence and Energy Laboratory, University of Windsor
2014	Prolific Scientific Writer, Turbulence and Energy Laboratory, University of Windsor
2011–15	Ontario Trillium Scholarship (\$160,000), Government of Ontario, Canada
2011	Doctoral Entrance Scholarship (\$6,000 per year), University of Windsor, Canada
2009	Outstanding Mechanical Engineering Researcher, Ferdowsi University

## EDITORIAL RECORDS

### Books

- 2021 Vasel-Be-Hagh, A., & Ting, D. (Eds.). (2021). *Utility-scale Wind Turbines and Wind Farms*. London, UK: The Institution of Engineering and Technology (The IET). doi: 10.1049/PBPO171E
- 2020 Vasel-Be-Hagh, A., & Ting, D. (Eds.). (2020). *Environmental Management of Air, Water, Agriculture, and Energy*. Boca Raton, FL, USA: CRC Press. doi: 10.1201/9780429196607
- 2019 Vasel-Be-Hagh, A., & Ting, D. (Eds.). (2019). *Advances in Sustainable Energy*. Switzerland: Springer International Publishing. doi: 10.1007/978-3-030-05636-0

### Special Issues

- 2021 *Tomorrow Energy & Resources*, Sustainable Energy Technologies and Assessments, Elsevier.
- 2018 – 20 *Future and Sustainability*, International Journal of Sustainable Energy, Taylor and Francis.
- 2018-19 *Further Integration and Advancement of Sustainability*, Sustainable Energy Technologies and Assessments, Elsevier.
- 2017-18 *Natural Resources and Energy Usage*, Sustainable Energy Technologies and Assessments, Elsevier.

### Proceedings

- In press Vasel-Be-Hagh, A., & Ting, D. (Eds.). (2023). *Responsible Engineering and Living*. Switzerland: Springer International Publishing.
- 2022 Vasel-Be-Hagh, A., & Ting, D. (Eds.). (2022). *Mitigating the Climate Change*. Switzerland: Springer International Publishing.
- 2021 Vasel-Be-Hagh, A., & Ting, D. (Eds.). (2021). *Sustaining Tomorrow*. Switzerland: Switzerland: Springer International Publishing.
- 2020 Vasel-Be-Hagh, A., & Ting, D. (Eds.). (2020). *Complementary Resources for Tomorrow*. Switzerland: Springer International Publishing.
- 2018 Vasel-Be-Hagh, A., & Ting, D. (Eds.). (2018). *The Energy Mix for Sustaining Our Future: Selected Papers from Proceedings of Energy and Sustainability*. Switzerland: Springer International Publishing.
- 2017 Vasel-Be-Hagh, A. (Ed.). (2017) *Proceedings of the International Conference of Numerical Analysis and Applied Mathematics*. American Institute of Physics (AIP).

## PUBLICATIONS

### Chapters

- 2021 Hackler, M., Vasel-Be-Hagh, A., & Ting, D. (2021). Chapter 1: The Current Status of Wind Power. In A. Vasel-Be-Hagh & D. Ting (Eds.), *Utility-Scale Wind Turbines and Wind Farms* (pp. 1-15). London, UK: The Institute of Engineering and Technology.

- 2021 Unser, L., & Vasel-Be-Hagh, A. (2021). Chapter 3: Scaling Utility-Scale Wind Turbines. In A. Vasel-Be-Hagh & D. Ting (Eds.), *Utility-Scale Wind Turbines and Wind Farms* (pp. 39-47). London, UK: The Institute of Engineering and Technology.
- 2020 Unser, L., & Vasel-Be-Hagh, A. (2020). Chapter 10: A Preliminary Evaluation on the Performance of Diffuser-augmented Vertical Axis Wind Turbines. In A. Vasel-Be-Hagh & D. Ting (Eds.), *Complementary Resources for Tomorrow* (pp. 163-174). Switzerland: Springer Nature.
- 2020 Long, C.S., & Vasel-Be-Hagh, A. (2020). Chapter 6: Storage-Integrated Energy Harvesters. In A. Vasel-Be-Hagh & D. Ting (Eds.), *Environmental Management of Air, Water, Agriculture, and Energy* (pp. 119-140). Boca Raton, FL, USA: Routledge.
- 2017 Vasel-Be-Hagh, A. (2017) Chapter 3: Optimization of wind farms for communities. In A. Vasel-Be-Hagh & D. Ting (Eds.), *Wind and Solar Based Energy Systems for Communities* (pp. 27-61), London, UK: The Institute of Engineering and Technology.

#### Peer-Reviewed Journal Articles

- 2022 Hosseini, A., Cannon, D.T., Vasel-Be-Hagh, A. (2022) Tip Speed Ratio Optimization: More Energy Production with Reduced Rotor Speed. *Wind*. 2 (4), 691 – 710.
- 2022 Hackler, M., Vasel-Be-Hagh, A., Pardue, B. On the Effect of Reynolds number and Structural Parameters on Vortex-Induced Vibrations. *International Journal of Fluid Mechanics Research*, doi: 10.1615/InterJFluidMechRes.2022042820.
- 2022 Ma, Y., Archer, C.L., Vasel-Be-Hagh, A. (2022). "The Jensen wind farm parameterization for the WRF and MPAS models," *Wind Energy Science Discussions*, doi: 10.5194/wes-2022-19.
- 2022 Ma, Y., Archer, C.L., Vasel-Be-Hagh, A. (2022). "Comparison of individual versus ensemble wind farm parameterizations inclusive of sub-grid wakes for the WRF model," *Wind Energy*, 1-23, doi:10.1002/we.2758.
- 2021 Nash, R., Nouri, R., Vasel-Be-Hagh, A. (2021). "Wind Turbine Wake Control Strategies: A Review and Concept Proposal," *Energy Conversion and Management*, 245, 114581.
- 2020 Nouri, R., Vasel-Be-Hagh, A., Archer, C. (2020) "The Coriolis Force and the Direction of Rotation of the Blades Significantly Affect the Wake of Wind Turbines," *Applied Energy*, 277, 115511.
- 2020 Archer, C.L., Vasel-Be-Hagh, A. (2020). Corrigendum to "Review and Evaluation of Wake Loss Models for Wind Energy Applications," [*Applied Energy* 226 (2018) 1187–1207].
- 2019 Archer, C.L., Vasel-Be-Hagh, A. (2019). "Wake Steering via Yaw Control in Multi-Turbine Wind Farms: Recommendations based on Large-Eddy Simulation," *Sustainable Energy Technologies and Assessments*, 33, 34-43.

- 2019 Archer, C.L., Wu, S., Vasel-Be-Hagh, A., Brodie, J.F., Delgado, R., St. Pe, A., Oncley, S., Semmer, S. (2019). "Meteorological Observations of Wind Turbine Effects in the Atmospheric Boundary Layer: The VERTEX Field Campaign," *Journal of Turbulence*, 20, 64-92.
- 2019 Zhang, W., Maleki, A., Gholipour Khajeh, M., Zhang, Y., Mortazavi, S.M., Vasel-Be-Hagh, A. (2019). "A Novel Framework for Integrated Energy Optimization of a Cement Plant: An Industrial Case Study," *Sustainable Energy Technologies and Assessments*, 35, 245-256.
- 2019 Dittner, M.E., Vasel-Be-Hagh, A. (2019). "Advances in Wind Power Forecasting," *Lecture Notes in Energy*, 70, 37-57.
- 2018 Archer, C.L., Vasel-Be-Hagh, A., Wu, S., Pan, Y., Yan, C., Brodie, J.F., Maguire, E. (2018). "Review and Evaluation of Wake Loss Models for Wind Energy Applications," *Applied Energy*, 226, 1187-1207.
- 2017 Vasel-Be-Hagh, A., Iakovidis, F. (2017). "The Effect of Wind Direction on the Performance of Solar PV Plants," *Energy Conversion and Management*, 153, 455-461.
- 2017 Vasel-Be-Hagh, A., Archer, C. (2017). "Wind Farm Hub Height Optimization," *Applied Energy*, 195C, 905-921.
- 2017 Vasel-Be-Hagh, A., Archer, C. (2017). "Wind Farms with Counter-Rotating Wind Turbines," *Sustainable Energy Technologies and Assessments*, 24, 19-30.
- 2015 Vasel-Be-Hagh, A., Carriveau, R., Ting, D.S.-K., Turner, J.S. (2015). "Drag of Buoyant Vortex Rings," *Physical Review E*, 92/4, 1-5.
- 2015 Vasel-Be-Hagh, A., Carriveau, R., Ting, D.S.-K. (2015). "A Balloon Bursting Underwater," *Journal of Fluid Mechanics*, 769, 522 – 540.
- 2015 Vasel-Be-Hagh, A., Carriveau, R., Ting, D.S.-K. (2015) "Flow over Submerged Energy Storage Balloons in Closely and Widely Spaced Floral Configurations," *Ocean Engineering*, 95, 59 – 77.
- 2015 Vasel-Be-Hagh, A., Carriveau, R., Ting, D.S.-K. (2015). "Structural Analysis of an Underwater Energy Storage Accumulator," *Sustainable Energy Technologies and Assessments*, 11, 165 - 172.
- 2014 Vasel-Be-Hagh, A., Carriveau, R., Ting, D.S.-K. (2014). "Flow past an Accumulator Unit of an Underwater Energy Storage System: Three Touching Balloons in Floral Configuration," *Journal of Marine Science and Application*, 13/4: 467 – 476.
- 2014 Vasel-Be-Hagh, A., Carriveau, R., Ting, D.S.-K. (2014). "Underwater Compressed Air Energy Storage Improved through Vortex Hydro Energy," *Sustainable Energy Technologies and Assessments*, 7, 1 – 5.
- 2013 Vasel-Be-Hagh, A., Carriveau, R., Ting, D.S.-K. (2013). "Numerical Simulation of Flow past an Underwater Energy Storage Balloon," *Computers and Fluids*, 88, 272 – 286.

- 2013 Vasel-Be-Hagh, A., Carriveau, R., Ting, D.S.-K. (2013). "Energy Storage using Weights Hydraulically Lifted above Ground," *International Journal of Environmental Studies*, 70/5, 792 – 799.
- 2013 Vasel-Be-Hagh, A., Ting, D.S.-K., Carriveau, R. (2013). "Correlating Flow Pattern with Force Coefficients in Air Flow past a Tandem Unit of Three Circular Cylinders," *International Journal of Fluid Mechanics Research*, 40/3, 235 – 253.
- 2013 Esfahani, J.A., Vasel-Be-Hagh, A. (2013). "A Numerical Study on Shear Layer Behavior in Flow over a Square Unit of Four Cylinders at Reynolds Number of 200 using the Lattice Boltzmann Method," *Progress in Computational Fluid Dynamics*, 13/4, 103 – 119.
- 2012 Esfahani, J.A., Vasel-Be-Hagh, A. (2013). "LB Simulation of Heat Transfer in Flow past a Square Unit of Four Isothermal Cylinders," *Comptes Rendus Mecanique*, 340/7, 526 – 535.

## TALKS

- September 2022 Active Tip Speed Ratio Control can Significantly Increase Annual Energy Production  
The North American Wind Energy Academy Conference, Delaware, USA
- June 2022 Wind Turbine Wake Redirection via External Vanes  
Responsible Engineering & Living Symposium, Windsor, ON, Canada
- June 2018 Negative yaw vs. positive yaw: The Coriolis or the rotor's direction of rotation  
Energy and Sustainability Conference, Windsor, Canada
- December 2017 Wind Farm Layout Optimization  
University of Windsor, Windsor, ON, Canada
- December 2016 Hub Height Optimization to Increase Energy Production of Wind Farms  
American Geophysical Union Fall Meeting, San Francisco, USA
- July 2014 Flow-Induced Vibrations of an Underwater Energy Storage Accumulator  
Offshore Energy and Storage Symposium, Windsor, Canada
- June 2013 Flow past an Isolated Underwater Balloon  
Canadian Congress of Applied Mechanics, Saskatoon, Canada
- December 2011 Employment of Lattice Boltzmann Method in Simulating Flow past Two Equal Diameter Cylinders  
Saudi Engineering Conference, Buraydah, Saudi Arabia
- March 2011 A Lattice Boltzmann Study of Flow past Moderately and Widely Spaced Units of Four Cylinders: Flow Structure Simulation  
Iranian Aerospace Society International Conference, Tehran, Iran
- July 2010 A Lattice Boltzmann Simulation of Cross-Flow around Four Cylinders in a Square Arrangement  
ASME Conference on Engineering Systems Design and Analysis.  
Istanbul, Turkey

February 2009      Studying the Lattice Boltzmann Method by Simulating Couette Flow  
Iranian Aerospace Society International Conference, Isfahan, Iran

## **TEACHING**

### **Tennessee Technological University**

Turbulence (Fall 2021)

Atmospheric Fluid Mechanics (Fall 2022 and Spring 2021)

Thermodynamics I (Spring 2023, Fall 2022, Spring 2021, Spring 2020, and Fall 2019)

Fluid Mechanics (Spring 2022, Fall 2021, Fall 2020, Spring 2020, Spring 2019, Fall 2018 (two sections), Spring 2018, Fall 2017)

Intermediate Fluid Mechanics (Fall 2020)

Conduction Heat Transfer (Spring 2022 and Fall 2019)

Modeling Atmospheric Flows (Spring 2023)

Atmospheric Measurements (Fall 2022)

Phase Change Flows (Spring 2023 and Spring 2021)

Aerodynamics of Damaged Wings (Spring 2020 and Fall 2021)

Integrated Storage Technologies (Fall 2019)

### **East Tennessee State University**

Thermodynamics I (Fall 2022 and Fall 2019)

Fluid Mechanics (Spring 2022 and Spring 2020)

## **SERVICE**

### **Committees**

#### Tennessee Tech University, Mechanical Engineering Department

Fall 2021 – present	Goals and Assessment Committee	Member
Fall 2021 – Spring 2022	Search Committee	Member
Fall 2018 – Spring 2021	Graduate Committee	Member
Fall 2017 – Spring 2018	Search Committee	Member
Spring 2018	Curriculum Committee	Member

#### Tennessee Tech University, College of Engineering

2020-2021	Planning the Hydraulics Lab for the AI Engineering Building	Member
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### **Outreach**

#### Tennessee Tech University, TN, USA

Summer 22	Explorations in Engineering and Computing Camp	Departmental Co-Leader
Summer 22	Governor's School for Emerging Technologies	R&D Team Leader

Summer 21	Explorations in Engineering and Computing Camp	Departmental Co-Leader
Summer 20	Governor's School for Emerging Technologies	Speaker
Summer 20	Explorations in Engineering and Computing Camp	Participant
Summer 18	Governor's School for Emerging Technologies	Speaker
Fall 17 – present	Showcase Events	Presenting Fluids lab

University of Windsor, ON, Canada

2015	The Natural Gas and Hydrogen Storage Symposium	Communication Chair
2014	Offshore Energy and Storage Symposium	Logistics
2014	Canadian Science Writers Association Annual Conference	Logistics

**Reviewer**

National Science Foundation

Thermal Transport Processes Program	Panelist (Panel 2)	2022
	Panelist (Panel 1)	2022
	Ad Hoc Reviewer	2022
Environmental Sustainability Program	Ad Hoc Reviewer	2022
	Ad Hoc Reviewer	2020
Fluid Dynamics Program	Panelist	2021
Major Research Instrumentation Program	Panelist	2020

Journals

Journal of Testing and Evaluation  
 Wind Energy Science  
 Atmosphere  
 Applied Energy  
 Sustainable Energy Technologies and Assessments  
 Energy Conversion and Management  
 Fluid Dynamics Research  
 Energies  
 International Journal of Numerical Methods for Heat & Fluid Flow  
 AIMS Energy  
 International Journal of Engineering and Technology Innovation  
 Journal of Energy Resources Technology (Transactions of the ASME)  
 International Journal of Energy Research

**Conferences**

2023	Engineering to Adapt	Windsor, ON, Canada	Program/Session Chair
2022	Responsible Engineering & Living	Windsor, ON, Canada	Program/Session Chair

2020	Mitigating Climate Change	Windsor, ON, Canada	Program Chair
2019	Energy & Resources for Tomorrow	Windsor, Canada	Program/Session Chair
2018	Energy and Sustainability	Windsor, Canada	Program/Session Chair
2017	International Conference of Numerical Analysis and Applied Mathematics	Thessaloniki, Greece	Symposium organizer
2015	Natural Gas and Hydrogen Storage	Windsor, Canada	Session Chair

### **Judge**

2022	Tennessee Tech University's Research and Creative Inquiry Day	Judge
2022	Tennessee's FIRST LEGO League Tournament	Judge
2018	Tennessee Tech University's Research and Creative Inquiry Day	Judge

### **STUDENTS ADVISED/EVALUATED**

#### **Adviser**

##### Ph.D. Students

<b>Name</b>	<b>Date</b>	<b>Dissertation</b>
1. Warren Sims	Fall 2022 –	A measurement field campaign at West Tennessee Solar Farm to Investigate the Thermomechanical Interactions of a Photovoltaic Canopy and the Viscous Sublayer
2. Scott Vanderlan <sup>2</sup>	Summer 2022 –	Large-Eddy Simulations of the Thermal Processes in the Near Vicinity of Photovoltaic Panels
3. Ty Hagan	Summer 2021 –	Infrared-Induced Melting, Evaporation, and Boiling
4. Daniel T Cannon	Fall 2020 –	Large-Eddy Simulations of the Thermal and Mechanical Interactions of Utility-Scale Photovoltaic Plants and Atmospheric Boundary Layer
5. Reza Nouri	Spring 2019 –	Predicting Upwind Boundary Conditions using a Convolutional Neural Network
6. Doug Clark	2018 – 2021	Multiphysics-Modeling of Fire-Induced Uranium Aerosol Formation – A-Posteriori Benchmarking of Experiments

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<sup>2</sup> Co-advising with Dr. Jie Cui

### MSc Students

<b>Name</b>	<b>Date</b>	<b>Thesis</b>
7. Devin Roland	Summer 2022 –	Wind Farm Wake Control using External Vanes
8. Devin Threet <sup>3</sup>	Spring 2021 –	Real-Time Mitigation of a Wing Damage Impact
9. Michael Hackler	2020 – 2021	On the Effect of Reynolds Number and Structural parameters on Vortex-Induced Vibrations of Circular Cylinders
10. Hollee Sadler	2020 – 2021	Aerodynamics of a Damaged Wing
11. Cody Long	2018 – 2020	Vortex-Induced Vibrations of Oscillating Bluff Bodies for Energy Storage/Conversion Applications
12. Ryan R Nash	2018 – 2020	Wind Farm Wake Control
13. Madison Dittner	2018 – 2020	Development of a Geometry Optimization Platform Using an In-House Developed Genetic Algorithm: Case of a Bladeless Wind Turbine

### Undergraduate Research Assistant

<b>Name</b>	<b>Date</b>	<b>Project</b>
14. Jordan Frerichs	Fall 2022 –	Design and fabrication of a gantry
15. Pierce Wooten	Fall 2021 –	Researching the impact of background flow on the propagation of IR laser beams
16. Brian Hawkins	Fall 2021 –	Assisting with wind tunnel lab maintenance
17. Luke Olson	Fall 2021 –	Wind turbine speed control
18. Koltar Houser	Fall 21 - Summer 22	Fabricating a steam engine set up to investigate the first law of thermodynamics
19. Nathaniel Lee	Spring and Summer 22	Maintaining the wind tunnel's traverse, assisting with the GSET R&D team
20. Olivia Cline	Fall 21	Wind turbine speed control
21. William McCarty <sup>★4</sup>	Spring 20 –Fall 21	Assisted with CFD simulations
22. Wesley Upshur	Fall 20 and Spring 21	Generating electricity from the suspension system
23. Caleb Dunlap	Fall 20 and Spring 21	Generating electricity from the suspension system
24. Christophe Blair	Fall 20 and Spring 21	Generating electricity from the suspension system

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<sup>3</sup> Co-advising with Dr. Andy Pardue

<sup>4</sup> Superscript (★) represents recipients of the Creative Inquiry Summer Experience (CISE) award

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| 25. Ty Hagan         | Summer 20 – Spring 21 | Doing CAD and 3D printing for several projects  |
| 26. Henry Pace       | Summer 20 and Fall 20 | Modeling a linear-to-rotary conversion mechanism via ANSYS  |
| 27. Stephen Foltz★   | Spring and Summer 20  | Engineering an Underwater Energy Storage  |
| 28. Adam Becklehimer | Spring 20             | Developing an AI-based signal classifier using Python   |
| 29. Andrew Davis     | Summer 19 – Fall 20   | Conducting a literature review on the aerodynamics of broken wings  |
| 30. Logan Unser★     | Summer 19 – Fall 20   | Scaling turbines for wind tunnel testing  |
| 31. Josh Nichols     | Summer 19 – 20        | Developing an algorithm to identify, curve-fit, and calculate the area under peaks within irregular signals |
| 32. John Stephenson  | Summer 2018           | Assisting with the fabrication of the wind tunnel's traverse system   |
| 33. Trenton Preston★ | Summer 2018           | Designing and fabricating a vortex gun  |
| 34. Yixing Wang      | Fall 21 and Spring 22 | Investigating the aerodynamics of a damaged scaled aircraft   |
| 35. Benjamin Cooper  | Spring 19 – Summer 21 | Wind Turbine Speed Control  |

#### Clubs

Men's Soccer Club, Tennessee Tech University, 2018 - present

#### **Advisory Committee Member**

#### Ph.D. Students

36. Miles Nevills, Tennessee Tech University, Advisor: Dr. Ethan Languri
37. Sainand Jadhav, Tennessee Tech University, Advisor: Dr. DuckBong Kim
38. Jimmy Meacham, Tennessee Tech University, Advisor: Dr. Rory Roberts
39. Trevor Kramer, Tennessee Tech University, Advisor: Dr. Rory Roberts
40. Saiful Islam, Tennessee Tech University, Advisor: Dr. DuckBong Kim
41. Seyi Ayeni, Tennessee Tech University, Advisor: Dr. Holly Stretz
42. Saanyol Igbax, Tennessee Tech University, Advisor: Dr. Steve Idem
43. Chaitanya Kodali, Tennessee Tech University, Advisor: Dr. Steve Idem
44. Jason Cook, Tennessee Tech University, Advisor: Dr. Pinggen Chen
45. Zhicheng Zhang, Tennessee Tech University, Advisor: Dr. Ismail Fidan
46. Mushrif Choudhury., Tennessee Tech University, Advisor: Dr. Jie Cui

- 47. Mahdi Mohammadizade, Tennessee Tech, Advisor: Dr. Ismail Fidan
- 48. Drew E. Winder, Tennessee Tech University, Advisor: Dr. Sally Pardue
- 49. Boma Kresning, University of Rhode Island, Advisor: Dr. Reza Hashemi

M.Sc. Students

- 50. Tyler R Qualls, Tennessee Tech University, Advisor: Dr. Pinggen Chen
- 51. Joseph Staller, Tennessee Tech University, Advisor: Dr. Steve Idem
- 52. Byron Harrington, Tennessee Tech University, Advisor: Dr. Rory Roberts