FACULTY CURRICULUM VITAE

Name: Dr. Mohamed Elbadawy
Rank: Assistant Professor - Mechanical Engineering

Personal Information

Nationality:	Egyptian
AU Joining Date:	09 Jan 2019
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Professional Information

Education:	**Qualification:** Doctorate **Major:** Engineering Mechanics **University:** Virginia Polytechnic Institute and State University **Year:** 2018/2019 **Qualification:** Masters **Major:** Engineering Mechanics **University:** Cairo University **Year:** 2010/2011 **Qualification:** Bachelor **Major:** Aerospace Engineering **University:** Cairo University **Year:** 2004/2005
Specialization:	Structural Health Monitoring Dynamics & Vibrations Sustainable and Renewable Energy
Current Academic Position:	Assistant Professor - Mechanical Engineering
Current Professional Positions:	NA

Previous Administrative Position Held:	NA
Previous Academic Positions Held:	- 2013-2018, Graduate Research/Teaching Assistant at Virginia Tech. - 2009-2013, Instructor at the German University in Cairo - 2008-2013, Graduate Assistant/Instructor at Cairo University
Fellowships And Honors:	Graduate Student Stipend, 2014/18 Virginia Tech graduate fellowship 2013/2014
Teaching Experience:	Assistant Professor - Mechanical Engineering, Australian University, Kuwait, January 2019 – Current. 2009-2013, Instructor at the German University in Cairo 2008-2013, Graduate Assistant/Instructor at Cairo University
Industrial And Technical Experience:	Aeronautical Engineer, Egypt Air Force
Research Interest:	Structural Health Monitoring Dynamical Systems and Control Systems Optimization Machine Learning and Data Analytics
Research Grants:	• Australian University research grant, 2022. • Kuwait Foundation for the Advancement of Sciences (KFAS) research grant, 2019.
Research and Publications including Journal and Books:	• Farhat, M.H., Mehdizadeh, A., Sedaghat, A., El Badawy, M., Djedi, B., Al-Khiami, M.I., Mostafaeipour, A. and Nazififard, M., 2025. Origami-inspired urban wind turbines: Scalable bladeless designs for decentralized renewable energy. Green Technologies and Sustainability, p.100253. • Sedaghat, A., Djedi, B., Farhat, M.H., Al-khiami, M.I. and El Badawy, M., A novel origami inspired single rotor horizontal axis wind turbine. Journal of Energy Systems, 9(3), pp.273-293. • Younis, A., Dong, Z., ElBadawy, M., AlAnazi, A., Salem, H. and AlAwadhi, A., 2022. Design and Development of Bladeless Vibration-Based Piezoelectric Energy–Harvesting Wind Turbine. Applied Sciences, 12(15), p.7769. • Younis, A.A. and Elbadawy, M., 2022. An adaptive sampling and weighted ensemble of surrogate models for high dimensional global optimization problems. Electronic Journal of Applied Statistical Analysis, 15(2), pp.421-442. • M. Z. Elbadawy, M. P. Singh, S. Bisht, “Dynamic Strain Response Measurement-Based Damage Identification in Structural Frames”, Struct Control Health Monit. 2018; e2181.
Paper Presentations at Professional Conferences:	• Sedaghat, A., Djedi, B., Farhat, M.H., Al-Khaiami, M.I., El Badawy, M.. Experimental study of an origami wind turbine concept. 13. Eur. Conf. Ren. Energy Sys. 26-27 May 2025, Perugia, Italy • Younis, A., Dong, Z., El Badawy, M., Al Khatib, F. and Al Anazi, A., 2022. Development of low-speed wind energy harvesting device. Energy Reports, 8, pp.22-27.

	• Younis A., AlKhatib F., ElBadawy M., 2022. "Fatigue and Stress Investigation of Wind Energy Harvesting Device". The First International Conference on Environmental Sciences and Engineering for Sustainable Development (ESESD 2022), Suhar, Oman. 9-10 March 2022 • M. P. Singh, M. Z. Elbadawy, "Earthquake Response Measurement-Based Methods for Damage Identification in Building Structures", 16th Symposium on Earthquake Engineering, IIT Roorkee, India, 20-22 December 2018. • M. P. Singh, S. Bisht, M. Z. Elbadawy, 2015, "Strain Response Measurement-Based Damage Identification in Building Frame Structures". 6th International Conference on Advances in Experimental Structural Engineering (6AESE).
College Service including committee Membership:	Curriculum Development committee member Department Course Moderation committee member Technology & Virtual Reality committee member
National Service:	NA
College Committees:	Curriculum Development committee member Department Course Moderation committee member Technology & Virtual Reality committee member