Pezhman Mardanpour

1. Name and academic rank:
Pezhman Mardanpour, Assistant Professor, Department of Mechanical and Materials Engineering

2. Education – degree, discipline, institution, year
Postdoc Electrical Engineering, UCLA, Los Angeles, month 2015
Ph.D. Aerospace Engineering, Georgia Tech, Atlanta, month 2013
M.S. Aerospace Engineering, Georgia Tech, Atlanta, month 2012
M.S. Aerospace Engineering, Sharif University of Technology, Tehran, Iran, month 2006
B.S. Mechanical Engineering, University of Mazandaran, Babol, Iran, month 2003

3. Academic experience – institution, rank, title
7 Years
Assistant Professor, Mech. & Mater. Eng. Dept., FIU, 2015-present
Postdoc Fellow, Samueli Elec. & Comp. Eng. Dept., UCLA, 2013-2015
Research Assistant, Daniel Guggenheim School of Aerospace Eng., Georgia Tech, 2008-2013
Research Assistant, Dept. of Aerospace Eng., Sharif Univ. of Tech., 2003-2005

4. Non-Academic experience:
Research Scientist: German Aerospace Center, DLR–Göttingen, 2005-2008

5. Certifications or professional registrations: N/A

6. Current membership in professional organizations
American society of Mechanical Engineers (ASME)
American Institute of Aeronautics and Astronautics (AIAA)

7. Honors and awards

8. Service activities (within and outside of the institution)
Organizer of AFRL-FIU Symposium, SBMT Scientific Committee Member in the subcommittee of Arti1cial Intelligent, Committee member on the scientific board of the CLC, Panel reviewer for Air Force Research Laboratory (AFRL), Topic Editor for MDPI Aerospace Journal, Editor for Journal of Technobiology, ABET coordinator for the course syllabus and contents for the structures group at MME, MME Curriculum Committee, NASA Exploration and Development of Space (SEDS) student chapter

9. Briefly list the most important publications and presentations from the past five years

Moshtaghzadeh, M., Izadpanahi, E., Bejan, A. and Mardanpour, P., 2021. Evolutionary Aeroelastic Design of Flying Wing Cross Section. **AIAA Journal**, pp.1-12.
Moshtaghzadeh, M., Izadpanahi, E. and Mardanpour, P., 2021. Stability analysis of an origami helical antenna using geometrically exact fully intrinsic nonlinear composite beam theory. **Engineering Structures**, 234, p.111894.

Mardanpour, P., Izadpanahi, E., Powell, S., Rastkar, S. and Bejan, A., 2021. Inflected wings in flight: Uniform flow of stresses makes strong and light wings for stable flight. **Journal of Theoretical Biology**, 508, p.110452.
Izadpanahi, E., Moshtaghzadeh, M., Radnezhad, H.R. and Mardanpour, P., 2020. Constructal approach to design of wing cross-section for better flow of stresses. **In AIAA Scitech** 2020 Forum (p. 0275).
Zekios, C.L., Liu, X., Moshtaghzadeh, M., Izadpanahi, E., Radnezhad, H.R., Mardanpour, P. and Georgakopoulos, S.V., 2019. Electromagnetic and mechanical analysis of an origami helical antenna encapsulated by fabric. In ASME 2019 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference. **American Society of Mechanical Engineers Digital Collection**.
Izadpanahi, E., Rastkar, S. and Mardanpour, P., 2019. Constructal Design of Flying Wing Aircraft: Curved and Swept Configurations. **AIAA Journal**, 57(12), pp.5527-5542.
Izadpanahi, E., Rastkar, S., Zisis, I., Fazelzadeh, S.A. and Mardanpour, P., 2019. Nonlinear time domain and stability analysis of beams under partially distributed follower force. **Applied Mathematical Modelling**, 73, pp.303-326.
Mardanpour, P., Izadpanahi, E., Rastkar, S., Lorente, S. and Bejan, A., 2019. Constructal Design of Aircraft: Flow of Stresses and Aeroelastic Stability. **AIAA Journal**, 57(10), pp.4393-4405.
Izadpanahi, E. and Mardanpour, P., 2018. Nonlinear Aeroelastic Response of Highly Flexible Flying Wing Due to Different Gust Loads. In Nonlinear Systems-Modeling, Estimation, and Stability. **IntechOpen**.
Mardanpour, P., Izadpanahi, E., Rastkar, S., Calastawad, S. and Levy, C., 2018. Effect of shooting and blast-induced gust on nonlinear aeroelastic stability and behavior of high-aspect ratio wing. **Journal of Sound and Vibration**, 433, pp.299-313.
Mardanpour, P., Izadpanahi, E., Rastkar, S., Fazelzadeh, S.A. and Hodges, D.H., 2018. Geometrically exact, fully intrinsic analysis of pre-twisted beams under distributed follower forces. **AIAA Journal**, 56(2), pp.836-848.
Mardanpour, P. and Rastkar, S., 2017. Constructal Theory and Aeroelastic Design of Flexible Flying Wing Aircraft. **Aerospace**, 4(3), p.35.
Mardanpour, P., Izadpanahi, E., Rastkar, S. and Hodges, D.H., 2017. Nonlinear aeroelastic gust suppression and engine placement. **Journal of Aircraft**, 54(6), pp.2402-2404.
Fazelzadeh, S.A., Karimi-Nobandegani, A. and Mardanpour, P., 2016. Dynamic stability of pretwisted cantilever beams subjected to distributed follower force. **AIAA Journal**, 55(3), pp.955-964.
Richards, P.W., Yao, Y., Herd, R.A., Hodges, D.H. and Mardanpour, P., 2016. Effect of inertial and constitutive properties on body-freedom flutter for flying wings. **Journal of Aircraft**, 53(3), pp.756-767.

10. Briefly list the most recent professional development activities

- Organizer of AFRL-FIU Symposium (https://fsi.fiu.edu/physicsofdesign/), April 2019. AFRL-FIU Symposium Physics of Evolutionary Design in Aerospace Systems, Miami, Florida, 1 day, Air Force Research Lab (AFRL), NSF, AFOSR, Academia, FIU