Professor Farbod Alijani

See:
http://www.3me.tudelft.nl/en/about-the-faculty/departments/precision-and-microsystems-engineering/people/personal-pages/farbod-alijani/
https://www.researchgate.net/profile/Farbod_Alijani/publications

Precision and Microsystems Engineering
Delft University of Technology (TUDelft), The Netherlands

Biography:
Farbod Alijani started a position as Assistant Professor on October 15, 2015 in the Department of Precision and Microsystems Engineering, Faculty 3mE at TU Delft. Farbod was born in Tehran, Iran in 1981. He received his Msc in 2006 and PhD in 2011 both from Tehran Polytechnic University with honors, specializing in non-linear vibrations and stability of shell-type structures. During his PhD, he spent one year as a Graduate Research Trainee at McGill University in Canada, and later became a Postdoctoral Scholar in the same institution working at Vibrations and Hydrodynamics Laboratory from 2012-2015. Before joining TU Delft, he also spent six months as a Research Associate in the Department of Industrial Engineering at University of Parma in Italy. Farbod's research activities are focused on identification, understanding and modeling of non-linearities in structures with and without fluid-structure interaction. His long term objective is to develop a study addressing open problems in non-linear dynamics and fluid-structure interaction at macro, micro and nano scale with innovations in experimental, theoretical and numerical investigation.

Research Interests:
Non-linear vibrations, Experimental modal analysis, Bifurcation dynamics & Chaos, Non-linear identification, Composite structures, Reduced-order modeling, Fluid-structure interaction, Dynamics of MEMS & NEMS

Selected Publications:

1. E. Tubaldi, M. Amabili, F. Alijani, Non-linear Vibrations of Plates in Axial Pulsating Flow. Journal of Fluids and Structures, 2015; 56:33-55.

2. F. Alijani, M. Amabili, Non-linear Static Bending and Forced Vibrations of Rectangular Plates Retaining Non-linearities in Rotations and Thickness Deformation. International Journal of Non-linear Mechanics, 2014; 67:394-404.
3. F. Alijani, M. Amabili, Effect of Thickness Deformation on Large-Amplitude Vibrations of Functionally Graded Rectangular Plates. Composite Structures, 2014; 113: 89-107.
4. M. Amabili, F. Alijani, Preface of the special issue: 4th Canadian Conference on Nonlinear Solid Mechanics (4th CCNLSM). International Journal of Non-linear Mechanics, 2014; 66:1-2.
5. E. Tubaldi, F. Alijani, M. Amabili, Nonlinear Vibrations and Stability of a Periodically Supported Rectangular Plate in Axial flow. International Journal of Non-linear Mechanics, 2014; 66: 54-65.
6. F. Alijani, M. Amabili, Nonlinear Vibrations of Shells: A Literature Review from 2003 to 2013. International Journal of Non-linear Mechanics, 2014; 58: 233-257.
7. F. Alijani, M. Amabili, Nonlinear Vibrations and Multiple Resonances of Fluid Filled Arbitrary Laminated Circular Cylindrical Shells. Composite Structures, 2014; 108: 951-962.
8. F. Alijani, M. Amabili, G. Ferrari, V. D'Alessandro, Nonlinear Vibrations of Laminated and Sandwich Rectangular Plates with Free Edges. Part 2: Experiments &Comparisons. Composite Structures, 2013; 105: 437-445.
9. F. Alijani, M. Amabili, Nonlinear Vibrations of Laminated and Sandwich Rectangular Plates with Free Edges. Part 1: Theory and Numerical Simulations. Composite Structures, 2013; 105: 422-436.
10. F. Alijani, M. Amabili, Theory and Experiments for Nonlinear Vibrations of Imperfect Rectangular Plates with Free Edges. Journal of Sound and Vibration, 2013; 332: 3564-3588.
11. F. Alijani, M. Amabili, Non-linear Dynamic Instability of Functionally Graded Plates in Thermal Environments. International Journal of Non-linear Mechanics 2013; 50:109-126.
12. F. Alijani, M. Amabili, Nonlinear Vibrations of Thick Laminated Circular Cylindrical Panels. Composite Structures 2013; 96:643-660.
13. F. Alijani, M. Amabili, Chaotic Vibrations in Functionally Graded Doubly Curved Shells with Internal Resonance. International Journal of Structural Stability and Dynamics 2012; 12:1250047 (22 pages).
14. F. Alijani, M. Amabili, F. Bakhtiari-Nejad, Thermal Effects on Nonlinear Vibrations of Functionally Graded Doubly Curved Shells Using Higher Order Shear Deformation Theory. Composite Structures 2011; 93: 2541-2553.
15. F. Alijani, M. Amabili, K. Karagiozis, F. Bakhtiari-Nejad, Nonlinear Vibrations of Functionally Graded Doubly Curved Shallow Shells. Journal of Sound and Vibration 2011; 330: 1432-1454.
16. F. Alijani, M. Amabili, F. Bakhtiari-Nejad, On the Accuracy of the Multiple Scales Method for Non-linear Vibrations of Doubly Curved Shallow Shells. International Journal of Non-linear Mechanics 2011; 46:170-179.
17. F. Alijani, F. Bakhtiari-Nejad, M. Amabili, Nonlinear Vibrations of FGM Rectangular Plates in Thermal Environments. Nonlinear Dynamics 2011; 66: 251-270.