

Maria Chierichetti

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Employment

Assistant Professor San Jose' State University <i>Department of Aerospace Engineering</i>	August 2019 { present San Jose', CA
Part-time Lecturer; San Jose' State University <i>Department of Aerospace Engineering</i>	January { May 2019 San Jose', CA
Assistant Professor { Educator; University of Cincinnati <i>Department of Mechanical and Materials Engineering</i>	August 2017 { July 2018 Cincinnati, OH
Visiting Assistant Professor; University of Cincinnati <i>Department of Mechanical and Materials Engineering</i>	August 2015 { July 2017 Cincinnati, OH
Assistant Professor; Worcester Polytechnic Institute <i>Department of Mechanical and Aerospace Engineering</i>	Aug. 2012 { Dec. 2014 Worcester, MA

Education

Ph.D. in Aerospace Engineering <i>Georgia Institute of Technology</i> { Thesis title: <i>Combined analytical and experimental approaches to dynamic component stress prediction</i> { Minor: Mathematics { Relevant graduate classes: CFD, Structural dynamics, Computational mechanics, Flexible multibody dynamics, Aeroelasticity, Helicopter Aerodynamics, Helicopter flight dynamics, Structural Acoustics, Statistics.	Jan. 2009 { August 2012 Atlanta, GA
M.S. in Aerospace Engineering <i>Georgia Institute of Technology</i>	Jan. 2009 { May 2011 Atlanta, GA
Laurea Specialistica (M.S.) in Aeronautical Engineering <i>Politecnico.55TdrS-114-357(Meinauor)51(gia)S--s]TJ11.183A7[362.02aS45T'a, GA</i>	Sept. 2004 { July 2007

University of Cincinnati

Cincinnati, OH

- { Experimental methods in Mech. Eng. - Structural motion - MECH 5072C (multiple sections); Fall 2015 & Fall 2016 & Fall 2017 Required laboratory class for seniors in mechanical engineering. Designed new experiment and improved three lab sessions based on available equipment.
- { Acoustics - MECH 6066/5166; Fall 2015 & Fall 2016 & Fall 2017 Elective 1st year graduate class. Re-designed class to include lab session in anechoic chamber (with support of National Institute of Noise Control) and reviews of numerical methods
- { Statics and Particle Dynamics - MECH 2020 (two sections); Spring 2016 & Spring 2017
- { Statics - MET 1071; Spring 2016 & Spring 2017

Worcester Polytechnic Institute

Worcester, MA

- { Structural Dynamics - ME-4712; Spring 2014 Designed new required class for senior aerospace engineers to satisfy ABET recommendations
- { Aeroelasticity - ME-593; Spring 2013 & Fall 2014 Designed new elective graduate class for introduction of new MS and PhD program in Aerospace Engineering
- { Aircraft Dynamics and Control - ME-4723; Fall 2012 Re-designed based on ABET requirements

Senior project advising

Worcester Polytechnic Institute

Worcester, MA

- { 2014-2015: Design of a Drop Tower for Impact Tests
- { 2014-2015: Design of a Helicopter Hover Test Stand
- { 2013-2014: Design and test of a flapping wing micro-aerial vehicle
- { 2012-2013: Design and Testing of a Miniaturized Fly. Co-advisor with Prof. M. Demetriou

Undergraduate student advising

2013-2014

Worcester Polytechnic Institute

Worcester, MA

- { Advised about 30 undergraduate students (sophomore-junior-senior) majoring in Aerospace Engineering

Professional Development

Engineering Community of Practice, organized by COE at SJSU, Fall 2019

Teaching and Learning Engineering: a Tango, organized by Prof. Nikos Mourtos at SJSU, February, 2019

Lighting Lessons in the Active Learning Classroom Course Design Institute, organized by CETL at the University of Georgia/F21 1.757 Spring 2019

American Helicopter Society national Lichten Competition, 1st place Southern Region, 2011

Student research advising

Graduate students

- { Currently advising 1 MS student in Aerospace Engineering at SJSU.
- { Two Ph.D. and three MS students advised on research projects at Worcester Polytechnic Institute.

Undergraduate students

Three undergraduate students advised on research projects at Worcester Polytechnic Institute.

Journal publications

1. M. Chierichetti, M. Demetriou, Moving sensors for improved estimation of dynamic structures, in progress. To be submitted to the Journal of Vibration and Control.
2. V. Rah0.9091 Tf 10.909 0R

2. M. Chierichetti, V. Rahmehin. Efficient response monitoring of flexible structures. SMASIS 2014, Newport, RI, September 8-10, 2014.
3. M. Chierichetti, V. Rahmehin. An FFT-based approach for dynamic response prediction of non-periodic systems. SPIE Smart Structures/NDE 2014, San Diego, CA, USA, March 9-13, 2014.
4. M. Chierichetti, C. Grappasonni. Experimental full-field response identification with limited set of operational data, 50th Annual Technical Meeting of the Society of Engineering Science, Providence, RI, USA, July 28-31, 2013.
5. M. Chierichetti, C. Grappasonni, G. Coppotelli, M. Ruzzene, A modal approach for dynamic response monitoring from experimental data, AIAA SDM 2013, Boston MA, April 8-11, 2013.
6. C. Grappasonni, M. Chierichetti, G. Coppotelli, M. Ruzzene. Using OMA for Full-Field Dynamic Response Identification. IOMAC'13, 5th International Operational Modal Analysis Conference, Guimares - Portugal, May 13-15 2013.
7. M. Chierichetti, Self-updating numerical models for Structural Health Monitoring, NEW.MECH 2012, Brown University, Providence, Nov. 3, 2012.
8. M. Chierichetti, M. Ruzzene. Calibration of dynamic models based on experimental measurements in a rotating environment. 49th Annual Technical Meeting of the Society of Engineering Science, Atlanta, GA, USA, October 10-12, 2012.
9. M. Chierichetti, A novel approach for dynamic response monitoring, Mechanical Engineering graduate seminar, WPI, Worcester, MA, Sept. 26, 2012.
10. M. Chierichetti, M. Ruzzene. Model updating in structural dynamics through a convergence algorithm. 53rd

1. A novel approach for dynamic response monitoring, Maria Chierichetti, March 8, 2013, Mechanical Engineering, Clarkson University, Postdam, NY.
2. Definition and validation of response monitoring approaches in the frequency domain, Maria Chierichetti, Feb. 1, 2013, North Eastern University, Boston, MA.
3. A combined numerical and experimental approach for stress prediction in rotating components, Maria Chierichetti, March 20, 2012, WPI, Worcester, MA. Invited Talk.

{ Volunteer as judge at MassAcademy, WPI, May 2013.

{ Volunteer to be an instructor of the WPI Tech Girl program, Spring 2014.

Peer-reviewer

Jan. 2009 { Present