

Curriculum Vitae

Personal Information

Name: **Giacomo D'Elia**

Education and Training

November 2017 Today	Ph.D. in Engineering Science, University of Ferrara, Italy. Description: The project aims to develop and perform innovative multi-axis vibration testing methodologies.
April 2017 October 2017	Postgraduate Fellowship , University of Ferrara, Italy. Description: MIMO advanced vibration control strategies using a tri-axis electro-dynamic shaker.
September 2014 March 2017	MSc in Mechanical Engineering, University of Ferrara, Italy. Final grade: 110/110 cum laude Thesis: <i>"Reference matrix for multi-axis random vibration control tests"</i> Description: The purpose was to investigate innovative MIMO target generation procedures pointing out the advantages and the challenges in terms of physical meaning and their impact on the random control strategy, in order to obtain a well-defined automatic procedure to include in the standard practice. Advisor: Prof. Emiliano Mucchi Co-Advisors: Prof. G. Dalpiaz, Dr. B. Peeters, Dr. U. Musella
July 2016 December 2016	Internship for Master Thesis. Company: SIEMENS Industry Software NV, Belgium. Advisors: Dr. Bart Peeters, Dr. Umberto Musella
September 2010 March 2014	BSc in Mechanical Engineering, University of Ferrara, Italy. Thesis: <i>"Analisi degli aspetti economici e legislativi della produzione di energia da fonti non fossili"</i> Final grade: 105/110 Description: This thesis explored the economical faisability of three main sustainable energy systems, i.e. mini-hydro, small wind farm and photo-voltaic system. Advisor: Prof. Mauro Venturini
July 2010	Scientific high school diploma, Ferrara, Italy.

Publications

January 2018	U. Musella, G. D'Elia, A. Carella, B. Peteers, E. Mucchi, F. Marulo, P. Guillaume. "A minimum drives automatic terget definition procedure for multi-axis random control testing" . Mechanical Systems and Signal Processing 107(2018): 452-468.
July 2017	G. D'Elia, U. Musella, E. Mucchi G. Dalpiaz. "Definizione della matrice di riferimento per test multiassiali controllati ad eccitazione stocastica" . In: proc. of Undicesima giornata di studio Ettore Funaioli, Bologna, Italy.
March 2017	U. Musella, G. D'Elia, S. Manzato, B. Peteers, P. Guillaume, F. Marulo, E. Mucchi. "Tackling the target matrix definition in MIMO Random Vibration Control testing" . In: proc. of Aerospace Testing Seminar, Los Angeles, USA.
January 2017	U. Musella, G. D'Elia, S. Manzato, B. Peteers, P. Guillaume, F. Marulo. "Analyses of target definition processes for MIMO Random Vibration Control tests" . In: proc. of IMAC XXXV, Los Angeles, USA.

Training Courses and Seminars

February 2018	<i>3th Seminary of Acoustics and Industry: Innovative Vibration and Noise Control Technologies for Industrial Products</i> , University of Ferrara, Italy.
April 2017	<i>Multi-Axis Randon Vibration Testing: test tailoring and structural durability</i> , University of Ferrara, Italy.
September 2016	<i>Course of modal analysis: theory and practice</i> , ISMA-2016 KU Leuven, Belgium.

Teaching

February 2018 Today	Tutor at University of Ferrara (Italy) in 'Mechanics of Machines'.
December 2017 Today	Teaching Assistant at University of Ferrara (Italy) in ' <i>Mechanics of Vibrations</i> ', ' <i>Mechanics of Machines</i> ', ' <i>Drives Mechanics</i> ', ' <i>Vibration Simulation and Testing for Product Development</i> ' and ' <i>Vibration Diagnostics of Rotating Machines</i> '.

Skills

Software and programming languages	LMS Test.Lab, LMS Virtual.Lab, MATLAB/Simulink, Latex, MSC.Nastran/MSC.Patran, COMSOL Multiphysics, SolidWorks and ANSYS.
Technical	Multi-Axis Vibration Tests, MIMO advanced vibration control strategies, Signal processing for the diagnostics of rotating machines and FE model.
Personal	Excellent interpersonal and organizational skills gained through training experience. During my academic career, I had the opportunity to work as active member of a team, enhancing my communication and presentation skills.

Languages

Italian	Mother tongue
English	Intermediate
French	Basic

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Ferrara, April 2018

Giacomo D'Elia