Francesco Saltari

Ph.D candidate
Aeronautical Engineering

[redacted]
Nationality: Italian

Work experience

Feb. 2018 – Jul. 2018 **Technical consulting**, *MSC.Software*, Rome.

Objectives *Teaching on aeroelastic flutter solutions concerning application cases of interest.* (P. I. Eng. Marco Calcagni)

Nov. 2016 – Feb. 2017 **Technical consulting**, *University of Naples Federico II*, Naples.

Objectives *Developing a software for the simplified modelling of the structural layout of transport aircraft wings for aeroelastic analyses to be used in the preliminary aircraft design.* (P. I. Prof. Fabrizio Nicolosi)

Education

nov. 2015 – Present **Ph.D fellowship in Aerospace Engineering**, *Sapienza University of Rome & CNR-INM (Institute of Marine Engineering)*, Rome.

Main research interests
- ✈ Virtual sensing applied to ships and flexible aircrafts.
- ✈ Integrated models of aeroelasticity and flight dynamics.

Thesis *Methodologies for Virtual sensing applied to aeronautical and ship structures* (Supervisors PhD Daniele Dessi and Prof. Franco Mastroddi)

Abroad Experience mar. 2018 – jun. 2018 Visiting scholar at University of Michigan, Ann Arbor, MI, USA, *Naval Architecture and Marine Engineering Department.* (Supervisor Prof. Matthew Collette)

oct. 2013 – oct. 2015 **Master Degree in Aeronautical Engineering**, *Sapienza University of Rome*, Rome.
Notes average: 29.25/30
Graduation note: 110/110 cum laude

Thesis *A dynamically coupled model for maneuvering flexible aircraft* (Supervisor Prof. Franco Mastroddi)

Honors
- ✈ *Excellent graduate student* award from the Alumni Noi Sapienza Association – 2015
- ✈ Participation to the *Excellence program*
- ✈ Participation to *AIAA-PEGASUS student conference* – Valencia 2016

oct. 2010 – nov. 2013 **Bachelor Degree in Aerospace Engineering**, *Sapienza University of Rome*, Rome.
Notes average: 27.16/30
Graduation note: 110/110

Thesis *Bending modes in ionic polymer-metal composite induced by non homogeneous distribution of electric potential* (Supervisor Prof. Paola Nardinocchi)

Languages

Italian **Mothertongue**

English **Intermediate**

Personal skills

Job-related skills
- ✈ Striving to achieve the set goal, patient and willing
- ✈ Excellent problem solving attitude
- ✈ Brilliant in using the strong theoretical background in the practical work
- ✈ Wishful to work in team

Technical skills

Main computational tools
- ✈ MSC Nastran & Patran (good knowledge of DMAP)
- ✈ MATLAB & Simulink

Engineering skills
- ✈ Structural dynamics/Aeroelasticity experience
- ✈ Fluid/structure interaction experimental and numerical experience
- ✈ Experience with Microsoft Office package and LaTeX
- ✈ Strong FEA background
- ✈ Advanced signal processing skills
- ✈ Skilled in programming and simulations
- ✈ Able to manage structural experimental tests
- ✈ Expert in integration of numerical and experimental models
- ✈ Good knowledge of optimization processes
- ✈ Expert in integrated modelling of aeroelasticity and flight dynamics
- ✈ Expert in virtual sensing and data fusion
- ✈ Experience in conducting experiments in INM ship model basin

Pubblications

Journals
- ✈ Saltari, F., Riso, C., De Matteis, G., & Mastroddi, F. (2017). Finite-element-based modeling for flight dynamics and aeroelasticity of flexible aircraft. *Journal of Aircraft, 54(6), 2350-2366*.

Conferences
- ✈ Dessi, D., Faiella, E., Saltari, F., Pigna, C., Celli, C., Miliante, T., & Di Paolo, E. (2017). Experimental analysis of the station keeping response of a double-barge float-over system with an elastically scaled physical model. Paper presented at the Proceedings of the *International Offshore and Polar Engineering Conference, 1175-1182.*
- ✈ Conti, E., Saltari, F., Eugeni, M., Camerini, V., & Coppotelli, G. (2017). Modal parameter estimate of time-varying system using operational modal analysis based on hilbert transform. Paper presented at the *17th International Forum on Aeroelasticity and Structural Dynamics, IFASD 2017, 489-502.*
- ✈ Saltari, F., Mastroddi, F., Riso, C., De Matteis, G., & Colaianni, S. (2017). On the control of aeroelastic/flight dynamic integrated stability of maneuvering aircraft. Paper presented at the *17th International Forum on Aeroelasticity and Structural Dynamics, IFASD 2017, 1971-1986.*
- ✈ Eugeni, M., Saltari, F., Coppotelli, G., & Dessi, D. (2017). A method for the estimate of modal parameters of time-dependent aerospace structural systems using operational data. Paper presented at the IOMAC 2017 - *7th International Operational Modal Analysis Conference, 78-81.*
- ✈ Saltari, F., Dessi, D., Faiella, E. & Mastroddi, D. (2018). Load and deflection estimation of a fast catamaran towing tank model via reduced order modeling and optimal natural observer. Paper presented at ISMA 2018 - *International Conference on Noise and Vibration Engineering, 3495-3509*

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