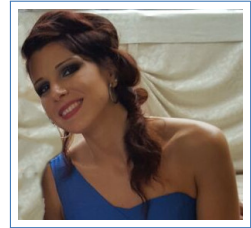


# Elisabetta Cataldi

## Curriculum Vitae

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### Info

Born on the September 02 , of 1988 in Cassino (FR,Italy)  
Citizenship Italian  
Skype elybetty1988

### Actual Position

Gen/2017 **Research activity on interaction control**, *Università degli Studi di Cassino e del*  
-Dec/2017 *Lazio Meridionale, Cassino, Italy.*

### Publications

#### Conference and journal submission

**Coordinated control of aerial robotic manipulators: theory and experiments.**, *G. Muscio, F. Pierri, M.A. Trujillo, E. Cataldi, G. Antonelli, F. Caccavale, A. Viguria, S. Chiaverini and A. Ollero.*  
TCST-Journal

#### Journal publications

**Adaptive Trajectory Tracking for Quadrotor MAVs in Presence of Parameter Uncertainties and External Disturbances**, *G. Antonelli and E. Cataldi P. Robuffo Giordano and S. Chiaverini and A. Franchi.*  
TCST-Journal

**Advanced ROV Autonomy for Efficient Remote Control in the DexROV Project**, *P.A. Di Lillo, E. Simetti, D. De Palma, E. Cataldi, G. Indiveri, G. Antonelli, G. Casalino*, in *Marine Technology Society Journal.*  
JMTS-Journal

**Underwater Intervention Robotics: An Outline of the Italian National Project MARIS**, *G. Casalino, M. Caccia, S. Caselli, C. Melchiorri, G. Antonelli, A. Caiti, G. Indiveri, G. Cannata, E. Simetti, S. Torelli, and others*, in *Marine Technology Society Journal.*  
JMTS-Journal

#### Conference publications

**6D Physical Interaction with a Fully Actuated Aerial Robot**, *M. Ryll , G. Muscio, F. Pierri, E. Cataldi, G. Antonelli, F. Caccavale and A. Franchi.*

**Impedance Control of an aerial-manipulator: Preliminary results**, *E. Cataldi, G. Muscio, F. Pierri, M. A. Trujillo, Y. Rodriguez, G. Giglio, G. Antonelli, F. Caccavale, A. Viguria, S. Chiaverini and A. Ollero.*

In 2016 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Daejeon, 2016

**Experiments on coordinated motion of aerial manipulators**, G. Muscio, F. Pierri, M. A. Trujillo, E. Cataldi, G. Giglio, G. Antonelli, F. Caccavale, A. Viguria, S. Chiaverini and A. Ollero.

In 2016 IEEE International Conference on Robotics and Automation (ICRA), Stockholm, 2016, pp. 1224-1229

**Basic interaction operations for an underwater vehicle-manipulator system**, E. Cataldi and G. Antonelli, Turkey.

Advanced Robotics (ICAR), 2015 International Conference of IEEE

**Virtual decomposition control for an underwater vehicle carrying a n -DoF manipulator**, G. Antonelli and E. Cataldi, Genova.

2015 MRS/IEEE OCEANS

**Adaptive Control of Arm-equipped Quadrotors. Theory and Simulations**, G. Antonelli and E. Cataldi, Palermo.

22th Mediterranean Conference on Control and Automation of IEEE

**Recursive adaptive control for an underwater vehicle carrying a manipulator**, G. Antonelli and E. Cataldi, Palermo.

22th Mediterranean Conference on Control and Automation of IEEE

**Experimental validation of a new adaptive control scheme for quadrotors MAVs**, G. Antonelli and E. Cataldi and P. Robuffo Giordano and S. Chiaverini and A. Franchi, Tokyo.

2013 IEEE/RSJ International Conference on Intelligent Robots and Systems

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## Experience

### Work

Gen/2014 **PhD: Robot systems cooperation control**, *Università degli Studi di Cassino e del Lazio Meridionale*, Cassino, Italy.  
-Dec/2016

Mar-Jun **Research activity on the development of a planner for aerial-manipulation vehicle, and the experimental results on an admittance control on a fully-actuated aerial platform**, , at the Antonio Franchi group press the LAAS-CNRS, Toulouse, France.  
2016

The research activity has been involed in two topics: the first one on the development of a planner with the challenge to integrate the capabilities of the motion planning with the reactivity of the inverse kinematic control; a second topic has been the realization of interaction with the environment of a fully-actuated platform (build by the Antonio Franchi team), both the topic have been done through the European Project Aeroarms.

June 2015 **Research activity on the development of an impedance control for quadro-rotors with arm-equipped**, CATEC-Centro Avanzado de Tecnologias Aeroespaciales, Seville, Spain.

The experiments have been made to effort an impedance control for quadrotors with an arm of 6-DOF attached, where the interaction with the environments has been required, through the European Project Arcas.

Jun **Adaptive control for rigid body serial chain on floating base**, *Università degli Studi di Cassino e del Lazio Meridionale*, Cassino, Italy.  
-Dec/2013

The research activity has been the development of an adaptive control for vehicle manipulator system.

- Nov 2012 **Research activity on the development of an adaptive control for quadrotors**, *Max Planck Institute for Biological Cybernetics*, Tübingen, Germany.  
The experiments have been made to effort an adaptive control for quadrotors on the basis of parameters uncertainties.
- Mar - **Approval of equipment for the electric lines protection (smart grid)**, *CPT*  
Oct/2011 *Engigneering*, Patrica, Italy.
- Gen - **Design of plant for the generation of green power electricity**, *P.N.O.*, Marina  
Mar/2011 di Minturno, Italy.
- Jul 2006 **Stage at the chemistry laboratory of the SKF**, *SKF srl*, Cassino, Italy.

### Teaching activity

- Sep-Dec 2016 **Course of System Theory exercises**, *at the Univeristà degli Studi di Cassino e del Lazio Meridionale*, Laurea Magistrale in Ingegneria Informatica.
- Sep-Dec 2015 **Course of System Theory exercises**, *at the Univeristà degli Studi di Cassino e del Lazio Meridionale*, Laurea Magistrale in Ingegneria Informatica.
- Sep-Dec 2014 **Freshman basic course.**, *at the Univeristà degli Studi di Cassino e del Lazio Meridionale*.
- Sep 2013 **Basic course on MatLab and Simulink**, *at the Univeristà degli Studi di Cassino e del Lazio Meridionale*.

### Education

- Jul 2015 **Summer school SIDRA 2015**, *Società Italiana Docenti e Ricercatori in Automatica*, Bertinoro, Italia.  
Robot Control and Underwater robotics.
- Jul 2014 **Summer school SIDRA 2014**, *Società Italiana Docenti e Ricercatori in Automatica*, Bertinoro, Italia.  
Introduction to the Analysis and Control of Nonlinear Systems and Unmanned Aerial Vehicles.
- Jul 2013 **Summer school SIDRA 2013**, *Società Italiana Docenti e Ricercatori in Automatica*, Bertinoro, Italia.  
System Biology and Vehicle Dynamics Control.
- 2010-20/02/2012 **Master degree on Electrical Engineering**, *Università degli studi di Cassino e del Lazio Meridionale*, Cassino, Italia.  
Automation and industrial production, thesis on Adaptive control for quadrotors, with vote 102/110.
- 2007-14/07/2010 **Degree on Electrical Engineering**, *Università degli studi di Cassino e del Lazio Meridionale*, Cassino, Italia.  
Thesis on the realization of an automatic bench trial to verify the mono-phase motors eccentricity, with vote 100/110.
- 2002-2007 **High school at the Istituto Tecnico Industriale**, *Istituto Tecnico Industriale E.Majorana*, Cassino, Italia.  
Chemistry specialization, with vote 82/100.

### Computer knowledges

- Languages JAVA, HTML, JavaScript, C#, C, C++, SQL, L<sup>A</sup>T<sub>E</sub>X, Visual Basic
- Operating system Unix, Windows, Windows Server

Softwares V-REP, Robotics Operating System (ROS), Eclipse IDE, Matlab e Simulink, Office Suite, Photoshop, Gimp, Blender, AutoCad e Autocad Electrical, Lab View, micro-controller programmer(PIC), FPGA.

## Foreign Languages

Italian mother tongue

Auto-evaluation CEFR (C2 the maximum value)

		<b>Understanding</b>		<b>Listening</b>		<b>Reading</b>
		Listening	Reading	Interaction	Production	
English	Well	<i>C2</i>	<i>C2</i>	<i>C1</i>	<i>C1</i>	<i>C1</i>
Spanish	Well	<i>C2</i>	<i>C2</i>	<i>C2</i>	<i>C2</i>	<i>C2</i>