# Curriculum Vitae Giorgia Pulazza





# **PERSONAL INFORMATION**

First name / Surname	GIORGIA PULAZZA
Telephone	+39 335/1460843
E-mail	giorgiapulazza@libero.it
Nationality	ITALIAN
Date and place of birth	RAVENNA NOVEMBER 20, 1993

# **EDUCATION AND TRAINING**

 Dates (from - to)
 Name and type of organisation providing education and training
 Principal subjects/occupational skills covered

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 Principal subjects/occupational skills covered STARTING ON NOVEMBER 2019 Academic Tutor at Alma Mater Studiorum of Bologna

Tutor of ELECTRIC POWER SYSTEMS M 1 (9066)

**STARTING ON FEBRUARY 2020** Academic Tutor at Alma Mater Studiorum of Bologna

Tutor of SISTEMI DI PRODUZIONE E CONVERSIONE DELL'ENERGIA ELETTRICA T M 1 (<u>37348)</u>

**FIRST PERIOD: 16/04/2019-16/07/2019; SECOND PERIOD: 14/08/2019-12/10/2019** Internship at Tsinghua University (Beijing) within a European Project called IRES-8

Coordinated transmission and storage planning with battery-based energy storage transportation (BEST) integration under high penetration of renewable energy

#### STARTING ON NOVEMBER 2018

PhD student in Electrical Engineering at the Faculty of Engineering Alma Mater Studiorum of Bologna

Planning and flexible operation of micro-grids with generation, storage and demand control as a support to sustainable and efficient electrical power systems

# SEPTEMBER 2015 UP TO APRIL 2018

Master's degree in Energy and Nuclear Engineering at Politecnico di Torino.

# Specialization with orientation in "Innovation in energy production".

Cognitive skills and tools for calculating, designing and managing components, systems for power generation and heat generation from renewable sources and fossil fuels, for rational use of energy and energy efficiency.

## Master's Thesis, discussed on April 13, 2018:

Storage system optimization for a high efficiency building with photovoltaic generation.

Supervisors: Professor Filippo Spertino (Politecnico di Torino) Professor Carlo Alberto Nucci (Alma Mater Studiorum – UNIBO)

• Level in national or international classification

107/110

#### Project developed during the two-year period of the master's degree:

- Optimization of an Energy system based on a microturbine and multistage flash desalination unit, within the framework of the master's degree program of Politecnico di Torino during the second semester of the first year (February 2016 July 2016). Thermodynamic and exergo-economic analysis of the system through the ad hoc software Aspen Plus. Plant optimization based on a rational use of energy and economic resources.
- *Optimization of a solar system installation*, within the framework of the master's degree program of Politecnico di Torino during the second semester of the first year (February 2016 July 2016). Simulation of a solar installation for the production of domestic hot water; system optimization and cost analysis.
- Lighting system design for a primary school located in Turin, within the framework of the master's degree program of Politecnico di Torino during the second semester of the second year (February 2017 July 2017). System design for different environments, each with different lighting requirements, through the software Dialux.
- *Effect of the length of carbon nanotubes on thermal conductivity*, within the framework of the master's degree program of Politecnico di Torino during the second semester of the second year (February 2017 July 2017). Non -equilibrium molecular dynamics end energy minimization simulations, carried out with the software GROMACS. Estimation of the variation of thermal conductivity in relation to the length of the nanotube.
- Technical and economic feasibility analysis of a small hydroelectric power plant Case study: Ovadas, within the framework of the Erasmus program of FCUL in Lisbon during the first semester of the second year (September 2016 February 2017). Sizing and design of a hydraulic circuit through AUTOCAD. Cost evaluation and economic analysis of the entire plant.
- *Energy efficiency evaluation of thermal and electrical systems*, within the framework of the Erasmus program of FCUL in Lisbon during the first semester of the second year (September 2016 February 2017). Electrical consumption and production costs evaluation; energy efficiency estimation for different scenarios.
- Net Zero Energy Building (NZEB) project Case study: primary school in Morocco, Casablanca, within the framework of the Erasmus program of FCUL in Lisbon during the first semester of the second year (September 2016 – February 2017). Structure design, thermal and electrical loads estimation, evaluation of the photovoltaic panels' optimal orientation through the software Energy Plus. Project carried out with the collaboration of colleagues of the Faculty of Architecture ISCTE of Lisbon.

#### SEPTEMBER 2016 TO FEBRUARY 2017

Energy and Environment Engineering at FCUL of Lisbon.

ERASMUS + Programme - 6 months of courses.

## FEBRUARY 2015 TO JUNE 2015

Internship at the company "Ducci & Sozzi Ingegneri Associati"

Designing a cogeneration plant powered by biomass with development of a comprehensive environmental and economic analysis.

#### SEPTEMBER 2012 TO OCTOBER 2015

Bachelor's degree in Energy and Nuclear Engineering at the Faculty of Engineering Alma Mater Studiorum of Bologna.

JUNIOR ENGINEER 105/110

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 Principal subjects/occupational skills covered
 Dates (from - to)

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 Principal subjects/occupational skills covered

#### • Dates (from – to)

Name and type of organisation providing education and training
Title of qualification awarded
Level in national or international classification

	Bachelor's Thesis, discussed on October 12, 2015: Evaluation of a cogeneration plant. Supervisor: Professor Carlo Maria Orlandelli (Alma Mater Studiorum – UNIBO)
<ul> <li>Dates (from – to)</li> <li>Name and type of organisation providing education and training</li> <li>Level in national or international classification</li> </ul>	<b>SEPTEMBER 2007 TO JULY 2012</b> Leaving certificate at scientific high school "Augusto Righi" in Cesena.
	88/100 <u>Thesis, discussed on July 2012</u> : The Unreasonable Effectiveness of Mathematics
CERTIFICATIONS	IELTS. 6.5 - B2 Level
ATTENDANCE AT CONFERENCE/ EVENTS PARTICIPATIONS	<ul> <li>9-12 June 2020 - IEEE Int. Conference on Env. and Electrical Engineering</li> <li>16,17,18 March 2018 - Green Week-Green Economy Festival in Trento. Participation in a selected activities program for 3 days.</li> <li>19,20 October 2017 - IRES-8 meeting at University of Bologna, local organizing commitee member, ed Scientific Admistrative Office assistance.</li> </ul>
PUBLICATIONS	C. Orozco, A.Borghetti, S. Lilla, G. Pulazza, F. Tossani, "Comparison Between Multistage Stochastic Optimization Programming and Monte Carlo Simulations for the Operation of Local Energy Systems", <i>2018 IEEE International Conference on Environment and Electrical Engineering</i> , Palermo, Italy, 12-15 June, 2018.
	G. Pulazza, N. Zhang, C. Kang, and C. A. Nucci, "Expansion Planning Model Coordinated with both Stationary and Transportable Storage Systems for Transmission Networks with High RES Penetration", Proc. 2020 IEEE Int. Conference on Env. and Electrical Engineering, Madrid, Spain, 9-12 June 2020.

Date: October 2020

Signature: