

# Europass Curriculum Vitae



## Personal Information

Surname, Name

**Rinaldi, Gianmario**

Nationality

**Italian**

Date of Birth

**26<sup>th</sup> April 1992**

Address

**Via Ferrata 5, 27100, Pavia (PV), Italy**

Email

**gianmario.rinaldi01@universitadipavia.it**

Telephone

**0039 0382 985796**

## Education and Training

Present (from November 2016)

**Ph.D. Student at the University of Pavia,**

► **Affiliation:** Department of Electrical, Computer and Biomedical Engineering, Identification and Control of Dynamic Systems Laboratory

► **Field of Research:** Power Systems, Power System Control, State Observers, Sliding Mode Control

► **Supervisor:** Prof. Antonella Ferrara

28<sup>th</sup> October 2016

**Master Degree in Electrical Engineering at the University of Pavia:**

► **Score:** 110 CUM LAUDE/110

► **Title of the Thesis:** Distributed Observers for State Estimation in Power Grids

► **Advisor:** Prof. Antonella Ferrara

► **Co-advisor:** Dr. Prathyush P. Menon, University of Exeter, United Kingdom

Present (from September 2011)

**Student of *Collegio Ghislieri* of Pavia, an institution committed to promote University studies on the basis of merit**

22<sup>nd</sup> September 2014

**Bachelor's Degree in Energy Engineering at the University of Pavia:**

▶ **Score:** 110 CUM LAUDE/110

▶ **Title of the Thesis:** Iberian Electrical Market analysis and simulation of the integration in the European Market in 2020

▶ **University Tutor:** Prof. Mario Montagna

▶ **Supervisor:** Dr. Stefano Rossi- RSE SpA, Milan, Italy

Present (from September 2013)

**Tutoring experiences (students assistance) at the Faculty of Engineering of the University of Pavia focused on the following topics:**

▶ Electrical Circuit (Present (from September 2014))

▶ Thermodynamic and Heat Transfer (from September 2015 to July 2015)

▶ Calculus I and Calculus II (from September 2012 to July 2014)

▶ Control Theory (Present (from March 2017))

July 2011

**High School Diploma at Liceo Scientifico Balilla Pinchetti, Tirano (SO)-Italy:**

▶ **Score:** 100/100

▶ **Winner of an award for the High School Diploma**

## **Working Experiences**

From May to July 2014

**Stage experience (225 hours) at RSE SpA (research center in electrical and energy sector), Milan-Italy:**

▶ Experience in view of the Bachelor Degree in Energy Engineering

▶ **Aim:** Iberian Electrical Market analysis and simulation of the integration in the European Market in 2020

▶ **Supervisor:** Dr. Stefano Rossi

▶ **University tutor:** Prof. Mario Montagna

September 2013

**Stage experience (80 hours) in Zero Energy, an engineering service in Ponte in Valtellina (SO), Italy:**

▶ Buildings energy analysis, using the professional software "Edilclima EC 700"

## Experiences Abroad

August 2017

► Drawing and analysis of floor heating systems, in buildings and industries, using the software “Autocad”

► Tours of the construction sites directed by Zero Energy

**Visiting Ph.D. Student-University of Exeter-College of Engineering, Mathematics and Physical Sciences-Exeter-United Kingdom**

**Erasmus Traineeship Visiting Student-University of Exeter-College of Engineering, Mathematics and Physical Sciences-Exeter-United Kingdom:**

From March to September 2016

► Master Course Thesis project (power grid state estimation based on distributed observers)

► Advisors: Dr. Prathyush P. Menon (University of Exeter), Prof. Christopher Edwards (University of Exeter) and Prof. Antonella Ferrara (University of Pavia)

August 2015

**Visiting student-St.John’s College-Cambridge-United Kingdom:**

► Winner of a fellowship promoted by *Collegio Ghislieri* of Pavia

## Personal Skills

Mother Tongue

**Italian**

Other Languages

**English-Professional Knowledge**

► Certification: Studio Cambridge Summer Course -August 2015-Level C<sub>1</sub> (Common European Framework of Reference (CEF) level)

► Certification: First Certificate in English (University of Cambridge Esol Examination)-Level B<sub>2</sub> (Common European Framework of Reference (CEF) level)

**German-Basic Knowledge**

► Certification: Start Deutsch 2 (Goethe Institut)- Level A<sub>2</sub> (Common European Framework of Reference (CEF) level)

Computer Skills and Competences

► **ECDL** certification

► **C Language**

► **Matlab and Simulink** (programming, simulation of dynamic systems)

► **L<sup>A</sup>T<sub>E</sub>X** and **L<sub>y</sub>X** (professional software for formatting of technical and scientific papers)

Artistic Skills and Competences

Attachments

► **Autocad and Autodesk Inventor** (professional software for 2D and 3D technical drawing)

► **Comsol Multiphysics and Magnet** ( Electric and Magnetic Field Simulations -FEM method)

► Singer (tenor) at the *Coro Universitario del Collegio Ghislieri* of Pavia

► Singer (tenor) at the *Coro Monti Verdi* of Tirano

► Attachment 1-List of Publications

2<sup>nd</sup> December 2017

Gianmario Rinaldi

## **Attachment 1-List of Publications**

1. G. Rinaldi, P. P. Menon, C. Edwards, and A. Ferrara, “Distributed observers for state estimation in power grids,” in Proc. American Control Conf., Seattle, WA, USA, May 2017, pp. 5824-5829.
2. G. Rinaldi, M. Cucuzzella, and A. Ferrara, “Third order sliding mod observer-based approach for distributed optimal load frequency control,” IEEE Control Systems Letters, vol. 1, no. 2, pp. 215–220, 2017
3. G. Rinaldi and A. Ferrara, “Higher Order Sliding Mode Observers and Nonlinear Algebraic Estimators for State Tracking in Power Networks” in Proc. 56-th IEEE Conference on Decision and Control, Melbourne, Australia, December 2017, (ACCEPTED).