

Europass Curriculum Vitae



Personal Information

Surname, Name

Rinaldi, Gianmario

Nationality

Italian

Date of Birth

26th April 1992

Address

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

Email

gianmario.rinaldi01@universitadipavia.it

Telephone

+39 0382985796, Mobile: +39 3485572948

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

December 2017

Passed the exams *Esame di Stato per l'Abilitazione alla Professione di Ingegnere Industriale-Settore Elettrico-Sezione A* to be licensed as Electrical Engineer

28th 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

22nd 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 and students assistance at the University of Pavia focused on the following topics:

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

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

Electrical Circuit (Present (from September 2014))

Control Theory and Process Control (Present (from March 2017))

July 2011

High School Diploma at Liceo Scientifico Balilla Pinchetti, Tirano (SO)-Italy, Score 100/100

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) at *Zero Energy*, an engineering firm in Ponte in Valtellina (SO), Italy:

Buildings energy analysis, using the professional software *Edilclima EC 700*

Analysis of floor heating systems, in buildings and industries, using the software *Autocad*

Tours of the construction sites directed by *Zero Energy*

Experiences Abroad

Present (from March 2018)

Visiting Ph.D. Student, University of Exeter, CEMPS, Exeter, United Kingdom:

Aim: design and validation of advanced and robust methods to monitor and control power systems

Co-supervisors: Dr. Prathyush P. Menon (University of Exeter), Prof. Christopher Edwards (University of Exeter)

May 2017

Presentation of the conference paper *Distributed Observers for State Estimation in Power Grids*, American Control Conference, Seattle, WA, USA

From March to September 2016

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

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 at 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 C₁ (Common European Framework of Reference (CEF) level)

Certification: First Certificate in English (University of Cambridge Esol Examination)-Level B₂ (Common European Framework of Reference (CEF) level)

German-Basic Knowledge

Certification: Start Deutsch 2 (Goethe Institut)- Level A₂ (Common European Framework of Reference (CEF) level)

Computer Skills and Competences

European Computer Driving License (ECDL), a computer literacy certification programme provided by ECDL Foundation

Microsoft Office

C Language

Matlab and Simulink (simulation of dynamic systems)

LaTeX and LyX (professional software for formatting of technical and scientific papers)

Autocad and Autodesk Inventor (professional software for 2D and 3D engineering drawing)

Comsol Multiphysics and Magnet (Electric and Magnetic Field Simulations based on Finite Element Method)

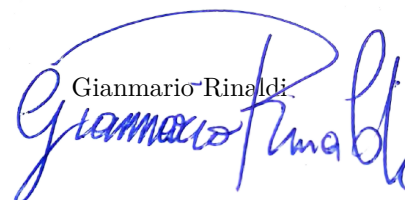
Artistic Skills and Competences

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

Attachments

Attachment 1-List of Publications

23rd May 2018

Gianmario Rinaldi


Attachment 1 - List of Publications

Journal Papers:

1. 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.

Conference Papers

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 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, pp. 6033–6038.
3. G. Rinaldi, P. P. Menon, C. Edwards, and A. Ferrara, **“A Super-Twisting-Like Sliding Mode Observer for Frequency Reconstruction in Power Systems: Discussion and Real Data Based Assessment,”** in Proc. 15-th International Workshop on Variable Structure Systems and Sliding Mode Control, July 2018, Graz, Austria, (TO BE PRESENTED).
4. G. Rinaldi and A. Ferrara, **“Decentralized Integral Sliding Mode Approach for Frequency Control and Unknown Demand Reconstruction in Power Systems,”** in Proc. 15-th International Workshop on Variable Structure Systems and Sliding Mode Control, July 2018, Graz, Austria, (TO BE PRESENTED).
5. G. Rinaldi and A. Ferrara, **“Relative Degree Identification for Sliding Mode Controllers Design,”** in Proc. 15-th International Workshop on Variable Structure Systems and Sliding Mode Control, July 2018, Graz, Austria, (TO BE PRESENTED).