

# CURRICULUM VITAE OF ANDREA POZZI

## Personal Details

Born 11th May 1994, Pavia, Italy  
Frazione Martinasca 2  
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## Education

- Sep. 17 - today: UNIVERSITÀ DEGLI STUDI DI PAVIA  
Ph.D. Student in the Identification and Control of Dynamic Systems Laboratory (Department of Electrical, Computer and Biomedical Engineering).  
Field of research: Lithium-ion Battery Modeling and Control.  
Supervisor: Prof. D. M. Raimondo.
- Dec. 17: ORDINE DEGLI INGEGNERI DELLA PROVINCIA DI PAVIA  
Qualification to practice as a professional Electrical Engineer.
- Sept. 15 - Jul. 17: UNIVERSITÀ DEGLI STUDI DI PAVIA  
Master in Electrical Engineering: 110/110 (**magna cum laude**)  
Topic of the thesis: "Optimal charge of Li-ion battery".  
Supervisor: Prof. D. M. Raimondo.
- Sep. 12 - Jul. 15: UNIVERSITÀ DEGLI STUDI DI PAVIA  
Bachelor in Industrial Engineering: 110/110 (**magna cum laude**)  
Topic of the thesis: "Optimization in water distribution plant".  
Supervisor: Prof. C. Belli.
- Sep. 08 - Jun. 2012: ISTITUTO DI ISTRUZIONE SUPERIORE "L. G. FARAVELLI" - BRONI  
Diploma di maturità scientifica, obtained **in only 4 years**, instead of 5 as usual in Italy (high school diploma).  
Final Grade: 100/100 (**with honors**)

## Notable Achievements

- Nov. 12: Appointed *Alfiere del Lavoro* by the Italian President G. Napolitano, being one of the best 25 students in Italy in 2012.

## Languages

**Italian:** Mother tongue.      **English:** Fluent.      **French:** Basic.

## Other Experiences

- Mar. 19 - today: Tutor of Advanced Automation and Control, Università di Pavia, Italy
- Mar. 15 - today: Tutor of Electrical Linear Circuit, Università di Pavia, Italy
- Mar. 18 - Jun. 18: Tutor of Basics of Automatic Control, Università di Pavia, Italy
- Nov. 16 - Dec. 16: Research activity on Li-ion Battery aging mechanisms at the *Institute of Energy and Process Systems Engineering*, TU Braunschweig, Germany
- Mar. 15 - Jun. 15: Stage in a water distribution company: ACAOP S.p.a. , Stradella, Italy

## Attendance to schools

- Mar. 19: "Oxford Battery Modeling Symposium", Pembroke College Oxford, March 18-19, 2019.
- Jan. 18: EECI Ph.D. school, "The scenario approach for systems, control and machine learning" by Prof. M. Campi and Prof. S. Garatti.

## Grants

- Jan. 18: IGSC GRANT 2018 in order to attend the EECI Ph.D. school, "The scenario approach for systems, control and machine learning" by Prof. M. Campi and Prof. S. Garatti.

## Computer Skills

- Platforms: Ubuntu, MS Windows NT/2000/XP/Vista/Seven/8/10
- Languages: C, Python
- Basic Technical Programs: Matlab / Simulink, COMSOL Multiphysics, Autodesk Inventor, PSpice, OrCAD, CasADi
- Office and Productivity: Microsoft Office, Open Office, Latex

## Publications

### International Conferences

1. A. Pozzi, M. Torchio, D.M. Raimondo, Film growth minimization in a Li-ion cell: a Pseudo Two Dimensional model-based optimal charging approach, ECC, Limassol, Cipro, June 12-15, 2018.
2. A. Pozzi, M. Torchio, D.M. Raimondo, Assessing the performance of model-based energy saving charging strategies in Li-ion cells, CCTA, Copenhagen, Denmark, August 21-24, 2018.

3. A. Mosca, A. Pozzi, D.M. Raimondo, Battery ageing-aware stochastic management of power networks in islanded mode, ICSTCC, Sinaia, Romania, October 10-12, 2018.
4. A. Pozzi, G. Ciaramella, K. Gopalakrishnan, S. Volkwein, D.M. Raimondo, Optimal design of experiment for parameter estimation of a Single Particle Model for lithium-ion batteries, CDC, Miami, Florida USA, December 17-19, 2018.

### **Scientific Journals**

1. A. Pozzi, G. Ciaramella, S. Volkwein, D.M. Raimondo, Optimal design of experiments for a lithium-ion cell: parameters identification of a single particle model with electrolyte dynamics, Ind. Eng. Chem. Res.
2. A. Pozzi, M. Zambelli, A. Ferrara, D.M. Raimondo, Balancing-Aware Charging Strategy For Series-Connected Lithium-Ion Cells: A Nonlinear Model Predictive Control Approach, IEEE Transaction on Control System Technology, under review.

### **Reviewer activity**

#### **International Conferences**

- International Conference on Control, Decision and Information Technologies (CoDIT)
- IEEE Conference on Decision and Control (CDC)
- American Control Conference (ACC)
- European Control Conference (ECC)

#### **International Journals**

- IEEE Transactions on Industrial Electronics