



Luca Zannini

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ABOUT MYSELF

Ambitious and self-motivated guy with a proactive approach to work.
Hopeless car and motorbike enthusiast, born in the Motor Valley.

WORK EXPERIENCE

 **UNIMORE UNIVERSITY** – MODENA, ITALY

Business or Sector Professional, scientific and technical activities | **Department** Hydrogen solutions |

Website <https://www.phd-dcem.unimore.it/>

PHD STUDENT IN FABRICATION OF FUEL CELL AND ELECTROLYSER – 08/2023 – CURRENT

- Study and development of innovative materials and components for fuel cells and electrolyzers.
- Design and development of an innovative electrochemical hydrogen compressor (EHC) prototype.
- Publications:
 - Hydrogen production from aluminum reaction with NaOH/H₂O solution: Experiments and insight into reaction kinetics (DOI: 10.1016/j.ijhydene.2024.08.152).
 - Investigations into 3D printing of conductive inks for electrode fabrication in PEM fuel cells using a design of experiments approach (DOI: <https://doi.org/10.1016/j.renene.2025.123833>)
- Conferences:
 - EFCF - European Fuel Cell Forum 2025 with the contribution titled 'Hydrogen production from aluminum reaction with NaOH/H₂O solution: experiments and insights into reaction kinetics'.
 - WFCC - World Fuel Cell Conference 2025 with the contribution titled 'Design and Implementation of a Prototype Line for Automated 3D Printing Deposition of Proton Exchange Membrane Fuel Cell (PEMFC) Electrodes'.
 - AIMAT - Associazione di Ingegneria dei Materiali 2025 with the contribution titled 'Automated 3D Printing Platform for the Fabrication of Proton Exchange Membrane Fuel Cell Electrodes: Design and Implementation'.
 - EFCH2 - European Fuel Cell and Hydrogen Conference Piero Lunghi 2025 with the contribution titled 'Design of Experiment (DOE) for Optimising Automated 3D Printing of Proton Exchange Membrane Fuel Cell (PEMFC) Electrodes'.

 **MASERATI S.P.A.** – MODENA, ITALY

Business or Sector Manufacturing | **Department** R&D | **Website** <https://www.maserati.com/it/it>

CONTROLS MANAGER – 06/2023 – 07/2023

- Planning activity for electrification projects;
- Relations with battery electric vehicle suppliers for electronic control unit;

 **PRIMO ELEMENTO START-UP** – MODENA, ITALY

Business or Sector Manufacturing | **Department** Hydrogen mobility |

Website <https://www.linkedin.com/company/primoelemento/>

PROJECT DEVELOPER – 09/2021 – 03/2023

- Co-founder of Primo Elemento - a start-up working with hydrogen fuel cell to power industrial vehicles;
- Born during university TACC project and financed by Marketz s.r.l.;
- PEM fuel cell system sizing - CAD design, FEM/CFD analysis;
- Purchasing officer;
- Stakeholders relations - buyers and suppliers;
- Regulations and certification processes;
- Drafting of presentations and materials for Demo Day, events and competitions related to the hydrogen sector.

 **L.T.E. LIFT TRUCK EQUIPMENT S.P.A. - TOYOTA MATERIAL HANDLING ITALY GROUP** – SAN GIOVANNI DI OSTELLATO (FE), ITALY

Business or Sector Manufacturing | **Department** Fuel Cell | **Website** <https://www.l-t-e.it>

R&D INTERNSHIP – 09/2021 – 03/2022

- Hydrogen suppliers scouting;
- PEM fuel cell system sizing - CAD design, FEM/CFD analysis;
- Certification analyses.

 **OSTERIA DELLA CAPRA** – BIBBIANO (RE), ITALY

WAITER – 08/2020 – 10/2020

- Room service attendant.

 **UNIMORE UNIVERSITY** – MODENA, ITALY

FORMULA SAE LABORATORY INTERNSHIP – 01/2019 – 04/2019

- Modeling and characterization of a powertrain cooling system;
- Cooling system design;
- Components testing on a test bench.

 **KINEMA S.R.L. / VILLA BONELLI A.S.D.** – REGGIO NELL'EMILIA, ITALY

LIFEGUARD – 06/2015 – 09/2019

- Swimmer assistant and inner plant security.

 **CONFIANZA SOC. COOP.** – REGGIO NELL'EMILIA, ITALY

FULL STACK DEVELOPER – 06/2014 – 07/2014

- Front and back-end applications developer for internal business processes.

● **EDUCATION AND TRAINING**

09/2019 – 04/2022 Modena / Parma, Italy

ADVANCED AUTOMOTIVE ENGINEERING - CURRICULUM RACING CAR DESIGN MUNER - Motorvehicle University of Emilia Romagna

- **UniMoRe:** vehicle design and dynamics, mechanical vibrations, materials and manufacturing processes, CAD and FEM analysis.
- **Dallara academy:** racing car chassis, architecture, composite materials, dynamic testing, experimental aerodynamics through CFD and wind tunnel data analysis.

Website <https://motorvehicleuniversity.com> | **Field of study** Engineering, manufacturing and construction |

Final grade 104/110 | **Level in EQF** EQF level 7 | **Thesis** Designing of fuel cell powerpack for forklifts truck

09/2015 – 04/2019 Modena, Italy

MECHANICAL ENGINEERING UniMoRe University

- Mechanics, physics, electronics and IT's subjects such as mechanics applied to machines, science and technology of the materials, machine and energy systems.

Website <https://www.ingmo.unimore.it/site/home.html> | **Field of study** Engineering, manufacturing and construction |

Final grade 97/110 | **Level in EQF** EQF level 6 |

Thesis Cooling system modeling of a single seater Formula SAE racing car for MoRe Modena Racing Team

09/2010 – 06/2015 Reggio nell'Emilia, Italy

SCIENTIFIC HIGH SCHOOL Liceo Ariosto-Spallanzani

Website <https://www.liceoariostospallanzani-re.edu.it>

21/02/2024 – 20/11/2024 Milano, Italy
C-LEAN ENERGY ACADEMY Pietro Fiorentini & GSoM

Website <https://www.som.polimi.it/c-lean-energy-academy/>

10/06/2024 – 14/06/2024 Forlì, Italy
SUMMER SCHOOL 'OPEN INNOVATION MANAGEMENT FOR A SUSTAINABLE TRANSITION' Ecosister - Pillar Training

Website <https://www.ecosister.it/>

01/2023 – 02/2023 Modena, Italy
SHORT MASTER - MOTORS, ELECTRIC DRIVES AND STORAGE SYSTEMS Fondazione Democenter-Sipe

Website <https://www.democentersipe.it>

11/2021 – 12/2021 Modena, Italy
FUEL CELL SHORT MASTER Fondazione Democenter-Sipe

Website <https://www.democentersipe.it/>

08/2021 – 09/2021 Bertinoro (FC), Italy
INTERNATIONAL SUMMER SCHOOL ON INDUSTRIAL ENGINEERING FOR ADVANCED AUTOMOTIVE UniBo University

Website <https://site.unibo.it/summer-school-advanced-automotive-engineering/en>

03/2021 – 05/2021 Reggio nell'Emilia, Italy
HARDWARE ACADEMY Open Accelerator Fondazione REI

Website https://www.tecnopolo.re.it/wp-content/uploads/2021/02/Locandina-Hardware-Academy_3.pdf

09/2020 – 06/2021 Modena, Italy
TACC - TRAINING FOR AUTOMOTIVE COMPANY CREATION UniMoRe University

Website <https://tacc.unimore.it>

11/2018 – 01/2019 Modena, Italy
VINTAGE CAR RESTORATION CNI Ecipar Modena

Website <http://www.automotiveacademy.unimore.it/site/home/archivio-news/articolo89046010.html>

05/2017 – 06/2017 Beijing - Shanghai, China
CHINA STUDY TOUR UniMoRe University

Website <https://www.fmb.unimore.it/china-study-tour-2017/>

06/2013 – 07/2013 Santa Barbara, United States
ENGLISH SUMMER SCHOOL EF Education First Santa Barbara (US)

Website <https://www.ef-italia.it/pg/usa/santa-barbara/>

● LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	B2	B2	C1
FRENCH	A1	A1	A1	A1	A1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

● SKILLS

MS Office | MS-DOS | Gantt | Catia V5/V6 | Ansys Fluent | Matlab/Sinulink | Solidworks | MSC Marc Mentat | Labview | Arduino | Asana | Mirò | Canva | Figma | Pascal | Visual Basic | C++/C# | Fortran | QPython | Maxima | ECDL certification - European Driving License

● DRIVING LICENCE

Driving Licence: AM

Driving Licence: A1

Driving Licence: A2

Driving Licence: A

Driving Licence: B

● HOBBIES AND INTERESTS

Car restoration, basketball, video making, photography, sailing, biking, skiing.

● VOLUNTEERING

AVIS, AIDO, ADMO

In compliance with the Italian legislative Decree no. 196 dated 30/06/2003, I hereby authorize you to use and process my personal details contained in this document.

What is stated in this CV corresponds to the truth according to art. 46 and 47 of the DPR 445/2000.

Luca Lammura