



Simone Bari

Home: Via Vittorio Veneto, 23, 72014 CISTERNINO (BR) **Address(es) 2:** Viale Duca Alessandro, 35, 43123 PARMA (PR) **Telephone(s):** +39 3889882492 **Mobile:** 3889882492
E-mail: simonebari2000@outlook.com

Gender: Male | **Date of birth:** Aug 23 2000 | **Nationality:** Italy

WORK EXPERIENCE

[03/2024 - 05/2025]

Undergraduate Internship

Università di Parma (PR) Italy

Company sector: Engineering and design

Business or sector: computer science, data processing and acquisition

Main activities and responsibilities: Design, schematic design and PCB layout in Altium Designer, prototyping and testing of a custom 600-24V/700W DC-DC converter, developed for the UniPR Racing Team's electric car.

Acquired skills and achieved objectives: Cross-functional technical skills acquired throughout the full development cycle of a power converter: electrical specifications, magnetic component sizing, schematic/PCB layout in Altium Designer, prototyping and experimental validation, with attention to galvanic isolation, EMI, and thermal dissipation in high-voltage automotive applications. Consolidated multidisciplinary teamwork in a Formula Student context, balancing electronic, mechanical, and vehicle-integration constraints under tight competition deadlines, with improved problem-solving and technical communication skills — the technical starting point for my current PhD project

EDUCATION AND TRAINING

[2025 - 2028]

Energy Systems, Powertrains, Vehicle Performance - Energy management/storage systems in electric or hybrid vehicles

Alma Mater Studiorum - Università di Bologna

Town: BOLOGNA

EQF level: 8

NQF level: Doctor of Philosophy (Ph.D.)

[2022 - 2025]

Electronic Engineering

Università degli Studi di PARMA

Town: PARMA

2nd level degree in Electronic engineering

Final degree mark: 110/110

EQF level: 7

NQF level: 2nd cycle degree/Master of Science (2 years)

Dissertation/thesis title: 600-24V DC-DC Converter with Flyback architecture

[2019 - 2022]

Electronic and Telecommunications Engineering

Politecnico di BARI

Town: BARI

1st level degree in Information technology

Final degree mark: 103/110

EQF level: 6

NQF level: 1st cycle degree/Bachelor (3 years)

Dissertation/thesis title: Sensors for Autonomous Driving

OTHER POSTGRADUATE STUDIES

[2026 - 2026] SUMMER SCHOOL

Duration: 12 days

Future of Automotive for Intelligent Mobility

Alma Mater Studiorum - Università di Bologna

Description:

I attended the doctoral-level summer programme (Bologna, July 20–31, directed by Prof. Vittorio Ravaglioli), covering advanced and sustainable propulsion systems, vehicle energy management and control, automotive connectivity, vehicle design and simulation, and environmental sustainability. Passed the final multiple-choice assessment and obtained the Certificate of Successful Completion, recognized as PhD training credits.

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s)

English

LISTENING: C1 READING: C1 WRITING: B2
SPOKEN INTERACTION: B2 SPOKEN PRODUCTION: B2

Diploma(s) or certificate(s)

English: Cambridge Assessment - Cambridge Assessment English, part of University of Cambridge, 29 06 2018 - European level: B2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user
Common European Framework of Reference for Languages

OTHER SKILLS

Communication skills

Team Spirit: Team spirit developed in the Formula Student Racing Team at the University of Parma, collaborating with engineers and students from different disciplines to design and build a racing car prototype: coordination, idea-sharing, and time management toward common goals.

Adaptability: Adaptability developed through the Formula Student environment, working with people of different nationalities and academic backgrounds: effective communication and flexibility across different ways of working and thinking.

Collaborative Problem-Solving: Problem-solving skills trained through technical discussions within the Racing Team, where active listening and confronting different viewpoints enabled an analytical approach to problems and the search for shared solutions.

Job-related skills

Advanced DC-DC converter skills developed within the Formula Student Racing Team at the University of Parma: from contributing to the 600-12V converter on the team's 2024 car to designing, for my master's thesis, the 600-24V/700W converter for the 2025-2026 Formula Student car, developed and validated using MATLAB/Simulink and SPICE, from simulation through prototyping and lab testing.

DIGITAL COMPETENCES

SELF-ASSESSMENT				
INFORMATION AND DATA LITERACY	COMMUNICATION AND COLLABORATION	DIGITAL CONTENT CREATION	SAFETY	PROBLEM SOLVING
Independent user	Proficient user	Independent user	Independent user	Proficient user

Digital competences - Self-assessment grid

Basic digital competence:

OFFICE AUTOMATION

Word Processors: Microsoft Word

APPLICATION SOFTWARE

CAD - Assisted Design: Altium Designer SE (Advanced) , Cadence (Foundation) , LTSpice (Advanced) | CAE Software: MATLAB Partial Differential Equation Toolbox (Advanced)

COMPUTER PROGRAMMING

Markup languages: LaTeX (Advanced) | Programming languages: C (Foundation) , MATLAB (Advanced) , Python (Foundation) , Simulink (Intermediate)

DRIVING LICENCE

Driving licence category B

PUBLICATIONS

Degree thesis "600-24V DC-DC Converter with Flyback Architecture" ; Thesis Author: Simone Bari - Advisor: Carlo Concari ; University of Parma (2025)

 "Sensors for autonomous driving cars" ; Thesis Author : Simone Bari - Advisor : Vittorio Passaro ; Polytechnic of Bari (2022)