

**Diego Anchieri****PREFERRED JOB**

Power Electronics Engineer for Automotive or Energy Industry

**WORK EXPERIENCE**

[ 09/2024 - 02/2025 ]

**Undergraduate Internship***Raw Power SRL* - REGGIO EMILIA (RE) Italy**Company sector:** Engineering and design**Business or sector:** computer science, data processing and acquisition**Main activities and responsibilities:** During the internship I developed the complete hardware of a three-phase traction inverter for the MotoStudent prototype**Acquired skills and achieved objectives:** Experienced in multi-layer PCB design, thermal management, and sensor acquisition circuit development. Skilled in designing low-noise analog front ends and implementing robust protection circuits for reliable system performance.

[ 11/2023 - 10/2024 ]

**Electric powertrain division member/alumno***UniBo Motorsport - Motostudent Team*, Edoardo Collamarini 8 - BOLOGNA (BO) Italy**Company sector:** Engineering and design**Business or sector:** education, training, research and development**Main activities and responsibilities:** A Power Analyzer was developed to perform current and voltage sensing, along with analog filtering, for the three-phase current and voltage signals of an electric motor. Signal acquisition is implemented using the FPGA of the commercial 'Miracle2' ECU (by Alma Automotive). Custom software processes the acquired signals to compute key performance metrics, including inverter efficiency, power factor, and Clark/Park transformations of the measured currents and voltages.

[ 10/2022 - 10/2023 ]

**Powertrain division manager***Unibo Motorsport - Motostudent Team*, Via Edoardo Collamarini 8 - BOLOGNA (BO) Italy**Company sector:** Engineering and design**Business or sector:** education, training, research and development**Main activities and responsibilities:** My responsibilities included coordinating a team of approximately six individuals, all students, with the goal of developing the electronic ecosystem for both high and low voltage aspects of the prototype. Each person contributed to one or more projects related to the electronic/computer science field. My role was to ensure the coexistence of each project with others and to provide technical support when needed.**Acquired skills and achieved objectives:** Here is a brief description of the projects I have either led or supervised:

- Software development of the commercial ECU 'Miracle2' by Alma Automotive;
- CustomBMShardware design and firmware development;
- Electric motor test-bench activity for motor characterization;
- Design and manufacturing of the battery pack;
- Telemetry infrastructure using 4G connection;
- Design and Manufacturing of the wiring system.

[ 09/2019 - 09/2022 ]

**Member of the electronics department***Unibo Motorsport - Formula SAE Team*, Edoardo Collamarini 8 - BOLOGNA (BO) Italy**Company sector:** Engineering and design**Business or sector:** computer science, data processing and acquisition**Main activities and responsibilities:** I was responsible for sensor data acquisition, including selecting

appropriate sensors, calibrating them, and implementing reliable data collection methods. I also worked extensively on embedded system programming, utilizing both C and LabVIEW to develop firmware and control logic for real-time data processing and device interfacing.

**Acquired skills and achieved objectives:** The experience was fundamental to apply the notions acquired in university courses but it was possible to deepen the topics mainly in the field of electronics and computer science not covered in depth by my field of study. As every summer the designed vehicle is engaged in racing, I learned to respect the deadlines for the design and implementation of the work carried out. As the team consists of multiple departments, I learned to collaborate with them in order to combine knowledge to solve a problem. Moreover, thanks to this experience I have developed a good problem solving skills and a good approach to new problems,

EDUCATION AND TRAINING

[ 2025 - 2028 ]

Automotive Engineering for Intelligent Mobility

Alma Mater Studiorum - Università di Bologna

Town: BOLOGNA

EQF level: 8

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

Principal subjects/occupational skills covered:

Curriculum: Energy Systems, Powertrains, Vehicle Performance

[ 2022 - 2025 ]

ELECTRIC VEHICLE ENGINEERING

Alma Mater Studiorum - Università di Bologna

Town: BOLOGNA

2nd level degree in Electric engineering

Final degree mark: 110/110

EQF level: 7

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

Dissertation/thesis title: Low-Voltage High-Current Inverter Design for Motorsport Applications

[ 2018 - 2022 ]

Automation Engineering

Alma Mater Studiorum - Università di Bologna

Town: BOLOGNA

1st level degree in Information technology

Final degree mark: 101/110

EQF level: 6

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

Dissertation/thesis title: Modeling and control of Electronic Throttle Drive

PRE-UNIVERSITY STUDIES

[ 2018 ]

Secondary school diploma: Scientific High School  
Italian secondary school diploma

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s)

English

LISTENING: B2 READING: B2 WRITING: B2

SPOKEN INTERACTION: B2 SPOKEN PRODUCTION: B2

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

DIGITAL COMPETENCES

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

Digital competences - Self-assessment grid

Basic digital competence:

## OFFICE AUTOMATION

**Office Suite:** (Highly Specialised) | **Presentation Software:** (Highly Specialised) | **Spreadsheets:** (Highly Specialised) | **Web Browser:** (Highly Specialised) | **Word Processors:** (Advanced)

## APPLICATION SOFTWARE

**CAD - Assisted Design:** (Highly Specialised)

## COMPUTER PROGRAMMING

**Programming languages:** C (Highly Specialised) , LabVIEW (Highly Specialised) , MATLAB (Highly Specialised)

## SYSTEMS AND NETWORKS MANAGEMENT

**Network architecture:** (Foundation) | **Operating systems:** (Intermediate)

## DATA MANAGEMENT

**DBMS:** (Foundation)

## GRAPHICS AND MULTIMEDIA

(Intermediate)

## PUBLICATIONS

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|------------------------|---|
| Conference proceedings | "Modular Multi-Output Electric Vehicle Charger with Ripple-Free Wide Output Voltage Range and No Carrier Synchronization" ; Diego Anchieri, Mattia Ricco, Vitor Monteiro and Riccardo Mandrioli ; IECON 2025 – 51st Annual Conference of the IEEE Industrial Electronics Society (2025)<br>doi.org/10.1109/IECON58223.2025.11221136 |
| Journal articles       | "Three-Layer Stacked PCB Design of a Low-Voltage High-Current Inverter for Motorsport Applications" ; Diego Anchieri, Mattia Vogni, Danilo David, Mattia Ricco, Giovanni Franceschini and Riccardo Mandrioli ; iEnergy (2025)   |

Date: 07/11/2025

Signature: 