

FRANCESCA

FURIA



An automotive engineer specialized in powertrain for racing and high performance cars. With experience in ICE calibration and ICE controls. Really good at working in team and dedicated to work.

EDUCATION

2022-PRESENT

ALMA MATER STUDIORUM – UNIVERSITÀ DI BOLOGNA and FERRARI S.P.A. – GESTIONE SPORTIVA

Ph.D. in AUTOMOTIVE FOR INTELLIGENT MOBILITY – 38th cycle
Development of control simulation models / strategies for high performance hybrid power units

2020-2022

MOTORVEHICLE UNIVERSITY OF EMILIA ROMAGNA (MUNER), MODENA, ITALY

M.Sc. in ADVANCED AUTOMOTIVE ENGINEERING - ADVANCED POWERTRAIN - **110/110 cum laude**
Thesis: Zero-dimensional model of heat rejection for a F1 Power Unit

2016-2020

POLITECNICO DI TORINO, TORINO, ITALY

B.Sc. in AUTOMOTIVE ENGINEERING – **106/110**
Thesis: Incompressible inviscid flow simulation in a blade cascade by means of the potential-flow theory

2014

KATTEGATTGYMNASIET, HALMSTAD, SWEDEN

Exchange Student

EXPERIENCES

2022

FERRARI S.P.A. – GESTIONE SPORTIVA – POWER UNIT PERFORMANCE AND CONTROL STRATEGIES

Student Internship: Optimization, validation and adaptation for the 2022 F1 engine of an existing Simulink capable of estimating the total heat rejection of the 2021 F1 engine, creation of a new physical 0D model to identify the heat fluxes inside the 2022 F1 engine, Optimization of an existing 0D model of the 2022 F1 engine and ECU to speed up the simulation time.

2020-2022

FORMULA STUDENT - MORE MODENA RACING DRIVERLESS TEAM

Powertrain and Transmission Division Leader: **ECU Bosch MS6.2** set up with **RaceCon**, Data analysis with **WinDarab**, **Calibration** of a **SUZUKY GSXR-600**, **implementation of gear switching logic** to be adopted in autonomous mode, **Implementation of controls** to actuate the **dc motors** mounted on the vehicle.

SOFTWARES

CAD and CAE Software: SolidWorks, 3DExperience (CATIA), Nx9, HyperCad

FEM Software: HyperMesh/Hyperworks, Marc Mentat

ECU Software: RaceCon, Sysma, WinDarab

Other Software: MATLAB, Star CCM+, MS Office

Languages: Italian (**Native**), English (**Proficient**), French (**Intermediate**)