

CONTACT INFO

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- Linkedin.com/in/theocouasnon
- www.tcsn.fr (portfolio)

SKILLS

TECHNICAL

- Control systems (Full vehicle, Energy, BBW, Gearbox)
- Simulation/Test Bench (MIL, HIL, DIL, Gearbox dyno)
- CAN, ETH communications
- Powertrain architecture

DIGITAL

- Matlab/Simulink
- Configuration/Calibration (System Monitor, M1 Tune)
- CAD (Solidworks, Catia, NX)
- Race data anlysis (Atlas Windarab, Motec I2)

LANGUAGES

- French : Native
- English : Native
- Spanish : Intermediate
- Italian : Intermediate
- USA and France Citizen

INTERESTS

Filmmaking : Youtube channel with 200k+ views ([link](#))

Vintage mechanics :
Bmw E30 restauration
Yamaha 125 cafe racer build

Electronics:
STM32 based VCU project
Self-made helmet intercom system
Electric skateboard li-ion battery build

Downhill mountain biking

Travelling/Discovery

VOLUNTEERING

2022/23/25 Le Mans 24h, welcome desk host and tour guide for the ACO

2024 Goodwood FOS, McLaren volunteer

2023 President of ITD, motorsport club of Estaca (100+ members)

Teacher for ITD's technical "initiations" (Engine Tear-down, Welding, Car Setup)

THEO COUASNON

Motorsport Systems & Simulator Engineer

F1 controls, DIL simulation, and motorsport EV systems engineering experience. Available for a full-time position starting February 2027.

EXPERIENCE

Simulator Engineer Intern

February - July 2026 | Dallara, Varano de' Melegari (ITA)

- Development
 - Modelling of full IT architecture for Dynisma DMG-360XY simulator install.
 - Creation of Simulink-based Simulator software wrapper gathering various models and hardware interfaces.
 - Designed "universal" add-on CAN display for additional information on chassis.
- Operational
 - Running of current customer sessions (LMDh, Indycar, F2) in both Varano (ITA) and Indianapolis (USA) Dallara DIL Simulators (rFpro/Asetto Corsa).
 - Overhaul of internal documentation for procedures and methods.

F1 Control Systems Engineer Intern

July - December 2025 | McLaren F1 Team, Woking (UK)

- Operational:
 - Shift Tuning for 2026 gearbox/PU (gearbox dyno, HIL).
 - Factory support for trackside engineers during several race weekends through live data analysis for reliability and performance (Atlas).
- Tool Development (Matlab, SQL, PowerBI):
 - 2026 energy deployment related tools (HIL, System Monitor).
 - Creation of a custom gearbox performance and reliability analysis app.

F1 Mechanical Design Engineer Intern

June - September 2024 | McLaren F1 Team, Woking (UK)

- Transmission/gearbox:
 - Introduced a reliability upgrade on the MCL38 (2024), from concept to production.
 - Designed and coordinated modifications for transmission test rigs for 2026 testing.
- Process improvement:
 - Created feature catalogs (UDF) in Catia 3DX, helping improve efficiency and reliability.
 - Wrote documentation standardizing design processes.

GT3/GT4 Motorsport Engineer Intern

July-August 2023 | Prodrive, Banbury (UK)

- Designed chassis and bodywork parts for the Aston Martin GT3 Evo, GT4 Evo and Prodrive P25 (including aero dive planes and suspension mounts).
- Assisted Aston Martin Racing support engineers during a race weekend of ADAC GT4 at the Nurburgring (Windarab data analysis).

WRC Rally Mechanic

July-August 2022 | PH Sport, Langres (FRA)

- Maintenance and repair jobs on Citroen DS3 WRC and C3 Rally2.
- Rally prep work (asphalt/dirt setups, tire fitting, truck loading).

PROJECTS

Volta (France's 1st race homologated EV, 1st retrofit Peugeot 208 Cup)

September 2022 - May 2025 | Laval (FRA)

- Co-Founded and Managed the Volta project (team of 25 students, +100k€).
- Lead the "control systems" division : Full custom harness, Motec VCU (Full custom Simulink), 3x CAN bus, BMS configuration, FIA-spec standards.
- Achieved the first ever French homologation (FFSA) for an electric race car.

Saar-e (Electric converted Yamaha YXZ-1000 Rally-Raid Buggy)

- Revamped the electrical integration of the two electric motorcycle drivetrains into the original harness.
- Competed in the Baja Portalegre 2023 in the YXZ-1000 Cup, as the only student team.

EDUCATION

ESTACA, Master's in Automotive Engineering

2021 - 2027 | ESTACA, Laval (FRA)

- Graduate Transport Engineering School, specialising in an automotive major.