




## JAVIER CARRILLO

### Industrial & Mechanical Engineer

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 www.github.com/JCentercreation

English (C1)

Spanish (Native)

German (A1)

#### VEHICLE SOFTWARE CALIBRATION

• AVL INCA	●	●	●	●	●
• AVL Concerto	●	●	●	●	○
• CANalyzer	●	●	●	○	○
• AVL PUMA	●	●	●	○	○
• DDT2000	●	●	●	●	○
• Diagra	●	●	●	●	○

#### COMPUTER AIDED DESIGN

• CATIA V5	●	●	●	●	○
• SolidWorks	●	●	●	○	○
• Sahpr3D	●	●	●	●	○

#### SOFTWARE DEVELOPMENT

• Java	●	●	●	○	○
• Python	●	●	●	○	○
• Swift	●	○	○	○	○
• C	●	○	○	○	○

Driven by a relentless passion for technology I have been always pursuing working on cutting-edge projects which challenge my skills. I started my career in a fellowship researching in diesel combustion engines, modeling combustion and initiating in engine calibration. Then I had the chance to try in Energy sector, first in technical areas and then in financial markets as an energy trader developing purchasing strategies, price and customer consumptions predictions and risk hedging. After that experiences I decided to turn back to automotive sector and I had the chance to work at companies like Nissan and Seat as a powertrain development engineer being in charge of engine and traction control modules software calibration. During my free time I like to create useful solutions for several needs by means of coding and CAE design.

## Work Experience



October 2018 - November 2019

### Powertrain Development Engineer

SEAT Technical Centre (Barcelona, Spain)

Powertrain software calibration, both combustion and hybrid vehicles, targeting pollutants emissions for Eu6 and Eu7 compliance. ECM software analysis and bug fixing proposal. Pollutants emissions test coordinator.

#### Achievements:

- Combustion calibration trade-off for pollutants emissions for 1.0L and 1.5L CNG, petrol and hybrid engines.
- Software validation for ECM, TCM and BCM modules, bugs detection and fixing.



October 2016 - August 2018

### Powertrain Development Engineer

NISSAN Technical Centre (Barcelona, Spain & Cranfield, UK)

Powertrain software calibration for diesel engines from base calibration at engine test bench (torque model, steady combustion settings, smoke and pollutants limits, etc) to transient calibration (altitude turbocharger settings, combustion modes fine tuning for hot and cold conditions, DPF settings corrections for transient states, etc). Window person between powertrain department and marketability/driveability/RSA departments.

#### Achievements:

- Base calibration for Eu6c compliance. Power, torque and smoke homologation.
- Transient calibration for Eu6d applications. Turbocharger calibration and combustion settings tuning for altitude and extreme conditions.
- Driveability and marketability concerns detection and fixing regarding ECM and TCM



February 2016 - June 2016

### Energy Trader

FOENER (Valencia, Spain)

OMIE electricity pool trader, developing purchasing strategies both for regular and intraday markets, pool price and customers consumptions forecasting and risk hedging.



April 2010- June 2012

### Technical Scrutineer

Spanish Motorsport Federation (Valencia, Spain)

Racing cars technical scrutineering from safety regulation to event organization for Formula 1, DTM, Formula 3, WTCC championships.

## Entrepreneurship



May 2016 - June 2018

### CAE Designer

We set up this small business in order to provide humble solutions to humans needs. Our main product was a 3d printed and tailor-made glasses by means of customer head 3d scanning and modelling and CAE design so the customer could order his glasses just from home using his smartphone.

## Education



2014 - 2015

**MSc. Energy Technologies** (majoring in renewable energies and energy efficiency)  
Polytechnic University of Valencia (Spain)



2006 - 2014

**BSc. & MSc. Mechanical and Industrial Engineering**

Polytechnic University of Valencia (Spain). **ABET** Certification.