Germán Idoate Gil – Senior Engineer in Control Systems

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Profile

I am a Senior Control Systems Engineer with over 10 years of experience in product development within diverse industries.

Throughout the past decade, I have built my career on technical excellence in mechanical and control systems, advancing to leadership roles where I guide and develop engineering teams to deliver across the entire product lifecycle. My strong communication skills empower my teams to achieve exceptional results and drive business success for every company I join.

Professional experience

Company: Trane Technologies (Spain)   Jan 2024 – Today

Role: Engineering Project leader

Responsibilities and achievements

Technical leader of the next generation of refrigeration control systems:

- Key contributor on the implementation of global control dev. processes (MBSE, CI/CD)
- Influence the project direction and outcomes to align with corporate strategic goals
- Single point of contact for the engineering team
- Engineering leader for hardware and software design in a >€1m development project
- Tech leadership of 10x engineers' (mechanical, controls, electrical, thermodynamics…)

Company: McLaren Automotive Ltd. (Spain and UK)   Aug 2018 – Dec 2023

Role: Senior Powertrain Controls engineer

Responsibilities and achievements

Powertrain systems SW and Calibration project leadership (up to 4x programs in parallel)

- Manage the technology roadmap for Control SW design (Engine and Gearbox control)
- Product attribute targets and features definition
- Technical management of the SW supplier in >€5m budget projects
- Manage stakeholder relationships and influence senior management decisions through regular reporting of project KPIs, timing and quality, ensuring alignment with strategic goals

Technical reference for powertrain system control

- Powertrain controls leader for 5x programs – McLaren GT, Speedtail, 765LT, Elva and 750S
- Motion Control expertise: Torque Structure, Torque model, Clutch model, Engine cooling, Derating and protection, Launch Control, Gearshifts
- Engine and Gearbox control integration with other of the vehicle systems (electric drive, ESP…)
- Data analysis and RCA in vehicle systems: hybrid powertrains, transmission, traction control
- In-vehicle testing – conducting tests in proving ground and race track environment

Company: Nissan Motor Corporation (UK)   Sept 2015 – Aug 2018

Role: Base engine calibration engineer – engine dyno engineer

Education

2014-2015 – Motorsport engineering MSc. (90 ECTS)

              Institution: Oxford Brookes University (UK)

2010-2014 – Mechanical Engineering University Degree (240 ECTS)

              Institution: Public University of Navarre (Spain)

Personal skills

Team leading, Strategic thinking, Communication, Project planning, Decision making, Teamworking, Problem solving, Negotiation, Fast learner

Technical skills

Product development

Product benchmarking, market requirements, system requirements and modelling (MBSE, ISO15288), functional safety (ISO-26262), controls model architecture, CAN Networks, mechanical integration, engine and gearbox calibration

Tools and programming languages

Microsoft Office, DevOps infrastructure, Requirements management (DOORS), Version control (GitHub, SVN), Calibration and test (ETAS INCA & MDA, CANape, CANDB++), Agile methodology (JIRA, Mantis), Coding (VSCode, Matlab, Simulink), C and Python

Computing Science

As part of my personal and professional development, I am actively self-studying computer science using online resources, including courses, books, and technical materials. My learning journey and progress are documented in this GitHub repository - https://github.com/gidoate/cs_learning

Languages

Spanish (native)   Full proficiency (speaking, reading and writing)

English (proficient – C1)   Full proficiency (speaking, reading and writing)

Italian (professional – B2)   Able to follow a meeting and to read/write emails

French (intermediate – B1)   Able to read/write emails, limited spoken communication