



help the world evolve

We love technology. And we understand it deeply. This enables us to pioneer ideas and shape strategies that keep our clients, partners and our people ahead of the develop game. world-class We innovations within sustainable mobility, energy and software to power a better future. We are so dedicated to this mission, you can feel it in everything we do.

FEV Italia S.r.l. Via P. Borsellino 38/16 10138 Turin, Italy

feel evolution

Master degree in Vehicle Engineering, Mechatronics, Electronics, Computer Science, or equivalent

Location: Italy, Bologna



Start from: Sep 2023

Duration: ~6 months

Objective: Internship + Thesis

Validation of Automotive ADAS Systems in Hardware-in-the-Loop Test Environments for European General Safety Regulation Homologation

ADAS technologies play a crucial role in enhancing road safety, and their compliance with safety regulations is of utmost importance. Hardware-in-the-Loop (HIL) testing offers an efficient and repeatable validation approach, ensuring Advanced Driver Assistance Systems (ADAS) meet the stringent requirements of the European General Safety Regulation.

This Master's thesis focuses on the validation of automotive ADAS within HIL test environments, specifically for tests related to homologation according to the European General Safety Regulation. The study presents the HIL test bench setup, defines specific ADAS test scenarios, and analyzes validation results compared to real-world testing.

Challenges and recommendations for future improvements are identified. The research aims to enhance ADAS regulatory compliance and contribute to safer mobility on European roads.

Would you like to learn more?

Giuseppe Mercurio Intelligent Mobility & Software Director Mobile: +39 342 547 2575 Email: mercurio g@fev.com