

Location: Sophia-Antipolis, France
Employment type: Experienced Professional
Contract type: Permanent position

Ref: RD_FST_SYS_ENG

FUNCTIONAL SAFETY ENGINEER

The Automotive industry is living a revolution. Electrification, autonomous driving, diverse mobility, connectivity are trends that are drastically changing the industry's rules. Among all decisive topics revolutionizing cars in the next future, Silicon Mobility is committed to support the rapid advent of electric and hybrid cars.

Silicon Mobility is a technology leader for cleaner, safer and smarter mobility. The company designs, develops and sells flexible, real-time, safe and open semiconductor solutions for the automotive industry used to increase energy efficiency and reduce pollutant emissions while keeping passengers safe.

The Company is opening a **Functional Safety Engineer** position in its main Research and Development center ideally located in the Sophia-Antipolis Technology Park on the French Riviera.

You are a brilliant and passionate functional safety engineer? You want to support the development of disruptive products accelerating the car's powertrain electrification? At Silicon Mobility, we like to light up our employee's potential. Are you up for the challenge? Contact us: send your resume and cover letter to hr@silicon-mobility.com.

ROLE & MISSIONS

You will be in charge of the technical safety concept, safety measures implementation and verification, safety analysis and functional safety assessment of automotive application like control and power management of the electric motor for Hybrid and Electric Vehicles, according to ISO26262 requirements.

Silicon Mobility offers to the market a solution based on a FPCU (Field Programmable Control Unit) named OLEA including the functional safety technology SILant. Your mission will consist in coordinating safety activities on customer projects based on usage of SILant safety mechanisms.

Your main activities will be:

- Evaluation and specification of hazard & risk assessment, safety goals, functional safety concept
- Technical safety requirement specification at system (ECU) level
- HW and SW safety requirement specification
- Safety mechanisms design specification (system, HW, SW) based on Silicon Mobility OLEA SILant solution
- Safety requirements verification plan
- Safety analysis (FMEA, FMEDA, FTA, dependent failure analysis)
- Safety metric calculation
- Functional safety assessment, covering process and product, to ensure ISO26262 compliance up to ASIL D objective
- Safety documentations
- Cooperation with system architect for coordination between risk analysis, specification, design and test activities
- Customer support
- Quality handling

The position requires pro-active involvement with all departments of the Company and customers.



REQUIRED SKILLS AND EXPERIENCE

EDUCATION:

- Master's degree in electronics and electro-technics

TECHNICAL SKILLS & EXPERIENCE:

- A minimum of 5 years of experience in ISO26262 analysis and implementation at system level for automotive application
- A FSP (Functional Safety Professional) certification from TUV-SUD or Exida would be appreciated
- A good experience on HW/SW automotive application in powertrain environment
- A knowledge of AUTOSAR
- A knowledge in C/C++ development for embedded system application
- Experience in powertrain algorithm for electric motor control, DC/DC and AC/DC,
- Solid understanding of Electronics,
- Experience in Matlab/Simulink

LANGUAGE SKILLS:

- Perfectly fluent in English
- German or Chinese speaking is a plus

BEHAVIORAL SKILLS:

- Be self-motivated, pro-active, flexible and capable of accepting new challenges,
- Effective communication skills : be able to work efficiently across different teams within Silicon Mobility, taking into account their individual needs and constraints,
- Strong problem-solving skills: be able to identify issues, obstacles, and opportunities and then develop and implement effective solutions

Please send your resume and cover letter to hr@silicon-mobility.com

