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| **Vacancy Reference no. XXXX**  | Functional Safety Engineer - Controls & Electronics Engineer |
| **Location: Shanghai or** **Hangzhou****Grade: C** | **OVERVIEW** |
| **Ricardo is a global engineering, strategic and environmental consultancy, founded in 1915 our vision is to maximise efficiency and eliminate waste.** **With a century of experience delivering excellence and innovation, Ricardo now employs over 3,000 engineers, scientists and consultants around the world and it is the passion and expertise of this community, which drives us forward and maintains our position of technical leadership.** **As a business, we value respect, integrity, innovation and passion and guided by these values we enable our customers to achieve sustainable growth and commercial success.** | Joining a World Class team of Control and Electronics engineers working on Hardware, Software and Controls solutions in **Automotive** **Hybridization** applications. The functional safety expert in this position will be responsible for functional safety compliance of the HCU control strategies controlling all hybrid functionalities in the vehicle. With the current Chinese market strategy, focus is mainly on mild hybrids (P0) and PHEV’s (P0+P4, P2).**Key Responsibilities** * Development of functional safety related activities
* Verification and Validation of functional safety related activities
* Audit of functional safety related processes
* Model Based Development of Safety features within HCU strategies
* Support the hybrid application and calibration engineering team developing functional safety compliant control strategies

*Everyday tasks will include:** Item definition for hybrid, transmission and engine control systems
* Hazard analysis and risk assessment (HARA), including FMEA/FTA etc.
* Functional safety concept development and process management
* Functional safety technical requirement development
* Customer interfacing for technical elements of projects
* Support the software/system team to do the safety related design and tests
* Interface between the Ricardo UK functional safety team and the Ricardo Shanghai project/customer team

**PERSONAL SPECIFICATION****Skills*** Experience of control system requirements capture, algorithm design and testing
* Analytical approach to developing controls algorithms in an automotive environment
* Languages:
* Mandarin for customer communication
* Very fluent in English (written and spoken) for intra-company communication with EU/US functional safety project teams

**Personal Attributes*** Robust character with strong self-drive and motivation.
* Organized and rigorous with personal target of high quality delivery
* Strong information transfer and inter-personal skills
* Focused on delivering results and working as an integral part of a programme team
* Being able to work under pressure and self-manage own time deadlines
* Willingness to do travel (within China and abroad)

**Knowledge*** Perfect knowledge of ISO26262
* Awareness of system level safety requirements and related standards beneficial
* Good skills with Mathworks Matlab/Simulink/Stateflow regarding controls development
* Qualified to degree level with technical background in vehicle controls design and / or implementation
* Understanding of hybrids, transmission, engine, vehicle concepts and operation
* Familiar with software quality processes (including ‘V cycle’) and related tools

**NB: All applications must be accompanied by a covering letter detailing how your skill and experience match this role.****Ricardo is an equal opportunities employer.** |
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