

Job Description: Senior Engineer / Lead Engineer – Model Based Control Software



Department: Design, Electrical and Electronic Systems

Job role overview:

To allow for the introduction of new and exciting technologies across our range of motorcycles, the Electrical & Electronic Systems department is looking to bring in talented, passionate, and driven engineers at both **Senior & Lead Engineer level** to support our Model Based Control Software team and support our future model development.

Report to: Team Leader – Model Based Control Software

Location: Hinckley, Leicestershire, UK, LE10 3BZ

Duties and Responsibilities:

- Technical Lead for Model Based Control Software & embedded systems.
- Develop & manage Drive train software and torque control features.
- Review logical architectures, Requirements, FuSa requirements and convert these to software requirements, architectures, solutions & appropriate documentation.
- Review software architectures and solutions.
- Define & Review HSI and control system.
- Interface with suppliers to deliver robust:
 - API's to hardware abstraction layers, board support packages etc & Basic SW
 - Suitable operating systems.
 - Accurate microcontroller loading estimations.
 - Memory requirements and other key resources.
- Continual improvement and support of full lifecycle Control Systems process for use in chassis, powertrain, driveline, suspension, or HMI systems.
- Continually advance design procedures, advise best practice and improve efficiency.
- Management of Control Software to deliver on time, to cost and quality.
- Technical support to working groups and projects as appropriate.
- Interface to the test & Validation team to ensure appropriate DVP's and test coverage.
- Planning and prioritisation of project activities.
- Maintain traceability of software units within MBCS.
- Attend and disseminate seminar / conference information.
- To undertake and assist with duties as required by your Manager.

Person Specification: Senior Engineer / Lead Engineer – Model Based Control Software



	Essential	Desirable
Qualifications and Attainments	BEng or MEng in Electrical / Electronic Engineering or Embedded Systems Engineering, and relevant experience.	Chartered Engineer
Professional Experience and Skills	<p>Lead role in an automotive environment.</p> <p>Lead of full V-Cycle development, controls theory, requirements capture / management and test case generation.</p> <p>High proficiency in Matlab Simulink, logic development, auto-coding and debugging on target hardware.</p> <p>High proficiency in vehicle communication systems (CAN, LIN) design, development and simulation / analysis tools.</p> <p>High proficiency in embedded systems and electronics.</p> <p>Identification and resolution of technical issues.</p>	<p>Experience in leading projects following a safety critical (ISO26262) process.</p> <p>ASPICE process implementation and support.</p> <p>Working with E-Powertrain and Battery Management Systems.</p> <p>Practical experience with AUTOSAR development methodology.</p> <p>Practical experience in 8D technical issue resolution.</p>
Personality and Motivation	<p>Confident and able to work with minimal supervision to tight deadlines and agreed timescales.</p> <p>Excellent report writing skills, with a clear and concise communication style.</p> <p>Capable of presenting high-level technical reports to Management.</p> <p>Role model to more junior engineers.</p>	Continuous process improvement.
Appearance and Characteristics	Well presented and professional in approach.	
Circumstances	<p>Flexible on working hours.</p> <p>Willing and able to undertake UK and Overseas travel if required</p>	