

Job Specification

Position	Software Engineer		
Reporting to Product Development Manager			
Purpose of Role	This software engineer position will be focused on the development of Brigade's latest collision avoidance systems. The candidate will need broad knowledge of the software development process and of the relevant technologies.		
	The role is based in the Product Development team, which is responsible for upgrades and product introduction, development & verification of Brigade's product portfolio.		
	This position will be predominantly in software development, requiring good coding skills, understanding of software testing, experience with version control and general data processing and analysis skills. The role involves the application of new technologies for active safety products to keep Brigade's product portfolio competitive and enhance its cost effectiveness. As part of the Engineering Department the successful candidate will also be required to interact with the Quality team and Applications team, as well as communicating information internally, to ensure product releases are successful.		
	The role will be within a small team tasked with delivering new, active safety products for Brigade. The applicant will be required to have a proactive and flexible approach, taking on a variety of tasks such as embedded system development and field testing in addition to the core role. The applicant will ideally have knowledge of automotive technology including standards and quality controls which are key to ensuring Brigade's product quality standards are met.		
Key Responsibilities	 Functional: Development and management of codebases from initial development through to product release. Performance optimisation and benchmarking of embedded systems to meet requirements. Development and use of simulation and optimisation software. Evaluation and field testing in line with requirements and engineering specifications. Product verification and validation. Preparation of detailed documentation. 		
	 Technology: Software development Embedded systems Organising, processing and analysing data Version control tools 		

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Working Relationships

- Team working and co-operation with all colleagues
- Direct communication with and support to colleagues
- Debating and selecting the best engineering solution in a team setting
- Participate in team meetings, training courses and workshops
- Building and maintaining relationships with suppliers and consultants
- Close links with staff developed and maintained to meet corporate objectives
- Required to always present a positive and professional image

Person Specification

Essential	Desirable	
 Education and Training BEng/BSc in Software, Electronic, Computer Science or similar or alternative educational background combined with solid professional experience High level of numeracy and literacy 	MEng/MSc in Software Engineering, Electronic Engineering, Computer Science or similar	
Experience and Skills		
 3+ years' experience developing software Programming experience: Two or more of the following: C, C++, C#, MATLAB, Python. Experience programming on PIC, MSP430, STM32, Arduino, Raspberry Pi or similar. Experience programming on desktop environment. Writing clean, stable, reusable code: Version control tools Working to coding standards Code documentation Good debugging skills Experience working in a team Experience organising own work 	 3+ years' industry experience Responsibility for managing large codebases Software/hardware integration and electronics prototyping skills Reporting development progress to stakeholders Work with CAN, I2C, SPI Experience with sensors and sensor fusion Interest in automotive systems 	

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Personality and Motivation	
 Self-motivated and takes full responsibility for the quality of own work Methodical approach Attention to detail Capable of prioritising tasks Shows intuition and ability to make decisions independently where appropriate Able to work to deadlines Eager to learn Natural respect for colleagues 	Comfortable with practical work to manufacture and install prototype systems
Interpersonal Skills	
 Good level of communication skills with the ability to communicate effectively with customers, management and colleagues (clear spoken English is critical) Helpful and approachable 	
Other requirements	
 Shows capability to manage own time and priorities Flexibility to take on a range of different tasks from field testing and sensor characterisation through to embedded coding UK driving license 	

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