

Job Specification

Lead Software Architect & Engineer

Responsible to: Head of Software Engineering

Grade of post: Senior / Principal

Salary: To be Agreed

Hours of work: 37 hours per week

Work location: Oakley, Bedford

Role Purpose:

You will be required to support a mixture of R&D and product development activities within a leading autonomy and unmanned systems company. Blue Bear continuously innovates within the core area of Unmanned Aerial Systems (UAS/UAV) such as autopilots, mission systems, ground control stations, and all supporting systems and infrastructure.

You will be keen to get involved in all development areas, and have a good track history / proven track record in both problem solving and quality software development.

Your role as a Lead Software Engineer will involve architecting, implementing and testing application and system software. This will include improving existing software and developing new features. As a Lead Engineer you will be technically leading and mentoring a small team of software engineers.

Working as part of a team in a multidisciplinary environment you will have good communication skills. A can-do attitude and a genuine passion for innovative technology will be advantageous. The opportunity will enable the successful candidate to gain knowledge of cutting-edge autonomous systems.

Key Responsibilities

- Primarily, your role will be to architect, implement and test mission critical applications and software for our existing and new products, written in C++ and Java.
- Technically lead a team to deliver new features of innovative UAV mission system.
- Act as a customer interface for your team from requirement gathering to delivery.

- Responsible for delivery, reporting and presentation of technical work to our customers and partners.
- Create and maintain internal documents and external customer facing documents.
- Get involved in simulation testing, flight testing and bug fixing.
- Gain system wide knowledge and become a subject matter expert
- Provide high level estimates for future projects and keep track of project budget.

Other Duties and Responsibilities

- To actively participate in Blue Bear's Performance Management Scheme.
- To undertake such other duties and responsibilities as may be reasonably required within the grade and level of the post.
- You will be expected to perform different tasks as necessitated by your evolving role within the company and the overall business objectives of the company. Some travel within the UK may be required.
- Awareness of DO-178 standards
- Process improvements esp. in the framework of Agile (Scrum and Kanban)

Equality and Diversity

We are committed to the promotion of equality of opportunity in all of our activities and to encouraging access to our organisation from all groups irrespective of the equality strands. We are working to create an environment in which cultural diversity and individual difference are positively valued in an atmosphere free from harassment and discrimination. We take our legal and moral obligations with respect to equal opportunities seriously and welcome dialogue with individuals on ways in which our equal opportunities policies and practice can be enhanced.

Health and Safety

The organisation together with the assistance of all employees are fully committed to developing a positive safety culture.

We encourage and support employees becoming involved in and participating in health, safety and welfare matters. Our goal is to motivate and empower all employees to work safely and protect their long-term health, not simply to avoid accidents.

PERSON SPECIFICATION

Education/Qualifications	S/L	I	A
<i>Desirable:</i>			
• Degree in Software Engineering or STEM discipline (e.g. Maths or Physics) with a demonstrable aptitude for Software Engineering	X		
Knowledge and Experience			
<i>Essential:</i>			
• Software architecture leadership	X	X	X
• Service Orientated Architecture (SOA)	X	X	X
• Java 8/11	X	X	X
• C++ 11/14/17	X	X	X
• Object Orientated Design	X	X	
• Network Protocol (UDP, TCP, IP)		X	
• Multi-threading	X	X	
• Full software development lifecycle		X	
• Regression testing (auto build and test frameworks)		X	
• Technical authorship for requirements, design and test		X	
• Quality conscious		X	
• Configuration Management and version control		X	
<i>Desirable</i>			
• 10+ years software development		X	
• Linux / Unix environment		X	
• Realtime Operating Systems (RTOS) e.g. FreeRTOS		X	
• Unit and Integration testing		X	
• Unified Modelling Language (UML) Design		X	
• Enterprise Architect – UML tool		X	
• Integration with electronics		X	
• Avionics background with DO-178 awareness		X	
• Scrum and Agile		X	
• JIRA - Application Lifecycle Management tool		X	
• Ansible, Teamcity and test automation tool		X	
Personal/Behavioral Attributes			
<i>Essential:</i>			
• Creative and innovative thinker and planner		X	
• Excellent problem-solving skills		X	
• Good analytical and communication skills		X	
• Passion for innovation		X	
• Excellent writing and speaking skills		X	
• Ability to work to tight deadlines		X	
• Team player		X	
Other Requirements			
Subject to security vetting to a minimum BPSS level (further security vetting based on position)	X		

S/L = Short Listing I= Interview A=Assessment