JOB DESCRIPTION

Job Title	**Software Solutions Architect**
Reports To	**Head of R&D**
Function	**Engineering - Research & Development**
Version/Date	**June 2026**

Company / Function

Pearson Engineering Ltd is a world leading provider of counter-mine and combat engineering equipment. Our product range is wide and varied, including complex attachments for armoured vehicles and remote-controlled mine clearance systems.

The current global situation, combined with our existing strong heritage and reputation with military end users, presents a unique opportunity to firmly position Pearson Engineering as World No.1 for Autonomous Combat Engineering Systems.

To achieve this, Pearson Engineering has committed to an ambitious R&D programme investing circa £3m over the next three years. This will be focused on people and capabilities to build a centre of excellence for world-class robotics engineering in the North East of England.

Job Purpose

Pearson Engineering is seeking a talented Software Solutions Architect.

You will work with colleagues across our R&D and Engineering teams to shape end-to-end software architecture and CI/CD process for our current and future Remote and Autonomous Systems. You will balance innovation, business goals and technical feasibility. You will lead the design of scalable, maintainable and secure software architecture, ensuring compliance with Defence industry standards.

You will be responsible for the software architecture and CI / CD process covering:

- Control of Robotic and Autonomous payloads and equipment.
- Vehicle automation,
- Computer vision and image processing,
- Sensor integration,
- Digital twin integration,
- Simulation development,
- Algorithm testing and data analysis.
- Safety systems

You will have the opportunity to meet and build relationships with global end-users and partners. You will spend time working with them to trial and optimise solutions for use in real world environments, including validation and verification for real world operations.

The role will involve working from early conceptual stages through to final release.

Key Responsibilities

- Lead technical aspects of defining and developing Software Architecture and CI/CD process for Pearson Engineering Remote and Autonomous Systems products and solutions.
- Implement software system level architecture as a key enabler for current and future scalable, maintainable and secure software defined solutions.
- Ensure governance and compliance objectives are set and achieved.
    - Including Defence industry and security standards
- Write clean, maintainable, and scalable code, utilizing modern software engineering practices and tools.
- Contribute significantly to the engineering lifecycle, including scoping, design, implementation, testing, deployment and maintenance of software systems.
- Collaborate with cross-functional teams to integrate software systems with physical systems and products.
- Facilitate integration of all software components into a fully functional software system.
- Participate in design reviews providing software technical input through the development process.
- Coach team members to improve capabilities and develop their software systems knowledge/expertise.
- Troubleshoot and resolve complex software technical issues.
- Stay informed on current trends in the software development field and Remote and Autonomous Systems. Proactively explore their implementation within the company.

Skills/Experience

- A degree in Software Engineering or Computer Science, with a grade of at least a 2:1 or an equivalent qualification and experience.
- Proven experience of software system level design and implementation, for scalable, maintainable and secure systems.
- Proven experience of implementing CI/CD processes for Safety Critical software systems.
- Proven experience in a relevant industry developing software architecture for integration with physical hardware, for example complex Robotics and Control systems.
- Experience with Linux and developing real-time software in C/C++ or Python is essential.
- An understanding of electronics and the ability to read electrical schematics is essential.
- Demonstrable knowledge and experience of current software engineering practices for Remote and Autonomous Systems is essential.
- Experience with ROS/ROS2, machine learning and OpenCV is advantageous.
- Experience of robotics, machine control systems and automation is desirable.
- Knowledge of CODESYS or similar PLC software is beneficial.
- Experience working in a multi-disciplined engineering team.
- Ability to investigate and interpret data, issues, and situations, to make sound decisions in high-stress situations.
- Appetite for learning new technologies and applications.
- Ability to communicate complex processes and procedures to colleagues.
- Self-motivating, proactive and results driven approach.
- Collaborative ethos is essential

Personal attributes and other requirements

- As a defence contractor, we have a number of security obligations placed upon the Company, which means that all our staff must be able to successfully achieve the relevant security clearances.
- You will be expected to support in-house training programmes, as required.

Working Conditions

- Mainly office based with visits to external customers (both UK and overseas) from time-to-time.
- Working conditions whilst on customer sites may include working outside of normal business hours and being required to work in inclement field conditions.
- Reduced working hours on a Friday.