



HWM Global

Innovations that keep
critical resources flowing.

Job Description

Job Title: Junior Software Engineer

Reports to: NPI Project Manager / Test Team Leader

Date Prepared: 03 July 24

Company Information:

At HWM we design and manufacture monitoring and telemetry equipment for water, wastewater and gas networks, together with telemetry AMR and facilities optimisation products.

Our primary focus for over 30 years has been monitoring the clean water distribution system, however in the last few years we have expanded into new sectors which include gas, water and electricity meter consumption, gas network monitoring and sewer monitoring. Our solutions have had a significant impact in helping our customers save time, effort, natural resources, energy, carbon, and cost.

HWM-Water Ltd is a Private Limited Company and wholly owned subsidiary of Halma Plc, a UK based business listed on the London Stock Exchange and a constituent of the FTSE 100 Index.

Each of the 50+ international companies owned by Halma is dedicated to the development, manufacture and marketing of products that are used to protect lives, or improve the quality of life, for individuals and businesses worldwide.

Main Purpose of Job:

We are seeking a Junior Software Engineer responsible for supporting the designing, developing, and maintaining software solutions that enhance and optimise manufacturing processes. This role involves collaborating with cross-functional teams to understand operational requirements, implementing software solutions, and ensuring the seamless integration of technology into manufacturing systems.

The products being tested are primarily dataloggers, which are used in the water network to monitor parameters such as water pressure and flow rate and transmit this data back to a central server.

We are looking for a candidate with an enthusiastic and determined approach who will bring further energy to our drive towards excellence.

Main Tasks:

Software Development:

- Support in the Design, development, and commissioning of functional test software for new products. The development language will be C# using the MS-Visual Studio platform.
- Gain the knowledge of other software languages required for supporting legacy products.
- Under the guidance of the Production Engineering team, you will develop the skills to Design, code, test, and deploy software solutions that improve manufacturing processes, efficiency and automation.
- Develop and maintain software applications that may include production planning, quality control, inventory management, and process optimisation systems.
- Maintenance and support of legacy test software.

Hardware Development:

- Under guidance you will support in the Design and configuration of accompanying test hardware.
- Maintenance / repair of existing test fixtures OEM and CEM sites.

Collaboration with Manufacturing Teams:

- Work closely with manufacturing engineers, operations, and other stakeholders to understand software needs and requirements.
- Collaborate on the design and implementation of software solutions that address specific manufacturing challenges.
- Work effectively in the Production Engineering team and with other disciplines and participate in all facets of New Product Introduction (NPI).
- To report periodically at design review and Project Meetings on development progress.

Integration with Manufacturing Systems:

- Under guidance you will support in the Integrate software solutions with existing manufacturing systems, equipment, and databases.
- Ensure seamless communication and data exchange between different components of the manufacturing environment.

Quality Assurance:

- Under guidance you will support in the implement testing procedures to ensure the reliability, security, and performance of software applications.
- Conduct thorough testing and debugging to identify and resolve software defects.

Documentation:

- Create and maintain comprehensive documentation for software applications, including technical specifications, user manuals, and system architecture.

Continuous Improvement:

- Stay informed about advancements in software development and manufacturing technologies.
- Identify opportunities for continuous improvement in software applications to enhance manufacturing processes.

Collaboration with IT Teams:

- Work with IT teams to ensure that software solutions align with overall IT architecture and security standards.
- Collaborate on the deployment and maintenance of software applications.

User Training and Support:

- Provide training to end-users on new software applications.
- Offer technical support and troubleshooting assistance for software-related issues.

Data Analysis:

- Develop tools for data analysis to extract actionable insights from manufacturing data.
- Collaborate with data scientists and analysts to optimise manufacturing processes based on data-driven decisions.

Person Specification:

- The ideal candidate will have some experience working as a Software or Test Development Engineer in a similar environment, using C# / C++. Knowledge of electronic hardware would be advantageous.
- Will have the ability to communicate with the wider manufacturing group daily and submit their software to the production engineering team for the introduction into manufacturing processes and suppliers.
- An independent thinker, taking concepts and offering and developing solutions. This is an interactive hands-on role.
- Resilience and the ability to handle pressure and challenging situations.
- Proactive and forward-thinking mindset with a focus on anticipating and mitigating potential risks.
- Strong attention to detail and a commitment to delivering high-quality work.
- Strong problem-solving and decision-making skills.
- Adaptability and openness to learning and change.
- Excellent organisational and time management skill

Qualifications/Training:

- Bachelor's degree in computer science, software engineering, or a related field.
- Proven experience in software development, with a focus on applications for manufacturing environments would be an advantage.
- Proficiency in programming languages such as Java, C#, C++, Python, or others relevant to manufacturing systems.
- Knowledge of Delphi would be advantageous.
- Familiarity with databases, data structures, and system integration.
- Strong problem-solving and analytical skills.
- Excellent communication and collaboration abilities.
- Knowledge of manufacturing processes and systems would be an advantage.
- Familiarity with Agile development methodologies.
- Ability to work independently and as part of a cross-functional team.
- Ability to take direction from other team members.
- Willingness to adapt working practices to align with established protocols.

The above is not an exhaustive list of duties and you will be expected to perform different tasks as necessitated by your changing role within the Company and its overall business objectives.

