

Position: Principal Embedded Software Engineer

This is an outstanding opportunity to develop your career in a dynamic and rapidly growing design consultancy with an ethos of building lasting partnerships with clients. It has never been a better time to join the team as we are at the point of significant expansion with a number of new and existing clients. Based in the i4 Product Design studio in Edinburgh, our design team are constantly expanding their engineering horizons in order to create custom-designed products which are specific to the clients' market needs. The net result is a highly creative and progressive work environment.

An opportunity has arisen for an Embedded Software Lead who will play an important role in strengthening our electronics capability. You will hold a principal embedded software position within i4, forming the basis of a team that will comprise a number of electronics hardware and software engineers to complement our mechanical engineering and product design expertise.

About You

You are a highly experienced embedded software developer with a background in electronics product development. You are a highly motivated individual who is quick to learn and able to manage working on multiple projects without direct supervision. You are already, or have the desire and capabilities to become, a team leader who is able to speak with clients and non-technical stakeholders to understand their requirements and explain technical concepts. You always document your designs to a high level of quality and have worked on full product releases, including preferably development of medical products or products for a similar regulated environment.

Key Responsibilities:

The remit for the role will be to:

- Take on a systems lead role for interdisciplinary projects involving electronics, software and mechanics, liaising with i4 in-house designers and engineering partners.
- Work with clients to define detailed software and electronics product requirements.
- Work with project managers to develop proposals and project plans.
- Provide in-house embedded software design capability.
- Specify, design and test modules and systems.
- Integrate product software around digital systems, sensors and interconnects
- Develop prototype systems for proof of concept work / early product prototypes using custom hardware and off-the-shelf modules.
- Develop tests including interfacing sensors / basic automation.
- Implement embedded software for prototypes / test circuits and products.
- Review the work delivered to ensure it meets functional and quality requirements.
- Support full-lifecycle product development.

It is expected that the roles will develop as the Electronics team at i4 is built up and the successful applicant should expect to play a significant part in developing both their own role and the nature of the team.

Qualifications/requirements:

Essential Technical Skills / Experience

1. Degree level qualification in Electronics Engineering, Software Engineering, Computer Science or equivalent.
2. 6+ years of industry experience
3. Expertise in embedded software system design
4. Excellent Embedded C and/or C++.
5. Experience with microcontrollers e.g. ARM.
6. Working Knowledge of real-time operating systems (RTOS / Linux / Windows including device drivers).
7. Experience of other programming languages is an advantage (e.g. C#).
8. Circuit build, test & debug.
9. Thorough grasp of Software Lifecycles
10. Highly competent at MS Office (Excel, Word, PowerPoint).

Desired Technical Skills

1. Experience with Systems / Single Board Computers / Modules.
2. Embedded micro-controller design (e.g. ARM).
3. Wireless connectivity (including Bluetooth / BLE).
4. Serial communications – USB, RS232, SPI / I2C / 1-wire other serial bus protocols.
5. Familiar with analogue & digital sensors and interfacing to acquisition electronics.
6. Data acquisition and analysis techniques.
7. Experience working in strongly regulated industry would be beneficial (e.g. medical device)
8. Working knowledge of Lab Equipment
9. IT networking.

This is a superb opportunity to join a forward thinking and successful SME business. In return you can expect a highly competitive salary & company workplace pension in a challenging and supportive culture and the opportunity to grow your career with a company that is set to expand rapidly.

Email jobs@i4pd.co.uk quoting job reference '**Principal Embedded Software Engineer**' and include the following:

- Your CV.
- A covering letter briefly describing the contribution your skills & experience would bring to the team.