



Position: Embedded Software Engineer

About i4pd

i4pd is an employee-owned product design and development consultancy. Our company is an established brand with an excellent reputation for achieving a competitive edge for small and large businesses alike by bringing new or improved products to market. We are a team of 30 experienced and creative designers and engineers who operate out of i4pd's studio on the south side of Edinburgh. The team works collaboratively with our clients to augment their internal capabilities, supporting them to add functionality, reduce cost, increase visual appeal, enhance usability, and keep pace with the IoT revolution. Our clients include household names and those on their way to becoming leading consumer electronics and medical device brands.

About the Role

We are seeking an Embedded Software Engineer who can strengthen our electronics and software capability. You will hold an embedded software engineering position within i4pd, as a member of a growing team of electronics hardware and software engineers to complement our mechanical engineering and product design expertise.

You will be located in our bright and open studio 20 minutes south of Edinburgh city centre in stunning rural surroundings with views of the Pentland hills. You will be offered a competitive package which in addition will be complemented by way of a company performance profit share (tax free up to a limit) and cycle to work scheme. We recognise the value to our staff of maintaining a strong work, life balance which we foster through flexible and hybrid working arrangements whilst also supporting continual training and development. You will undertake a 37.5 hour a week of flexible hours Monday to Friday (around core hours of 10am to 3pm).

About You

You are an embedded software developer with a background in electronics and software product development. You are a highly motivated individual who is quick to learn and able to manage working on multiple projects with limited supervision. You are able to speak with clients and non-technical stakeholders to understand their requirements and explain technical concepts. You document your designs to a high level of quality. Experience in Zephyr, FreeRTOS, iOS or Android App development, or experience in the development of medical products or products for a similar regulated environment, will be a bonus.

Your Role:

The remit for the role will be to:

- Deliver software for interdisciplinary projects involving electronics, software and mechanics
- Work with clients and our project managers to define detailed software and electronics product requirements
- Work with clients and our project managers to scope, define, implement and test software for electronics products
- Integrate product software around digital systems, sensors and interconnects
- 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 role will develop as the Software and Electronics team at i4pd evolves and the successful applicant should expect to play a significant part in developing both their own role and the nature of the team.



Your Background:

- Degree level qualification in Electronics, Software Engineering, Computer Science or equivalent
- 3+ years of industry experience
- Expertise in embedded software system design
- Good skills in Embedded C and/or C++
- Experience with microcontrollers e.g. ARM, MSP430, PIC etc
- Working knowledge of operating systems (RTOS / Linux / Windows)
- Strong reviewing rigor
- Testing / Debugging / Troubleshooting of designs Good understanding of Software Lifecycles and development methodologies
- Highly competent at MS Office (Excel, Word, PowerPoint)

Desired Technical Skills

- Experience of other programming languages (e.g. C#, Python, Swift, Java)
- Experience with Embedded Systems / Single Board Computers / Modules
- Familiarity with software design documentation approaches such as UML
- Wireless connectivity (for example Bluetooth / BLE)
- Serial communications (for example USB, RS232, SPI, I2C or 1-Wire)
- Familiarity with analogue & digital sensors and interfacing to acquisition electronics
- Data acquisition and analysis techniques

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

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

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