Position: Senior Electronics 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. The company employs 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

You will hold a Senior Electronics Systems position and report to i4pd's Principal Electronics Engineer, joining a team of 8 electronics hardware and firmware engineers within the company.

As a technical lead on projects, you will be responsible for developing creative solutions to challenging problems associated with the design, development, and sustaining engineering for our clients' products. As a design partner to our clients and champion of their customers, we seek someone who will bring enthusiasm and passion to the product development process and will have a direct impact on the commercial success of their products. The successful candidate should be able to quickly embrace and implement our internal ISO9001 and ISO13485 QMS, ensuring their application whilst contributing to our continual improvement initiatives.

You will be located in our bright and open studio based 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).

Your Role:

The remit for the role will be to:
- Take on a systems design lead role for interdisciplinary projects involving electronics, software and mechanics, liaising with i4pd in-house designers and engineering partners.
- Work with clients to define detailed electronics & software requirements.
- Guide designs towards meeting regulatory requirements as required.
- Work with i4pd's Business Development Director and Project Managers to develop proposals and project plans.
- Provide in-house electronics system design for analogue and digital products
- Specify, design, and test electronics systems.
- Develop prototype systems for proof of concept work / early product prototypes using custom hardware and off-the-shelf modules.
- Develop test circuits including interfacing sensors, communications and basic automation.
- Review the work from other team members delivered to ensure it meets functional and quality requirements.
- Support embedded software for prototypes / test circuits and products.
- Support full-lifecycle product development.
- Help defining processes, templates, libraries and everything needed to make a more efficient work environment

Your Background:

- You are a highly experienced electronics hardware design engineer with a track record of commercially focused product design.
- You are a highly motivated individual who is quick to learn and able to manage working on multiple projects without direct supervision.
- You have the desire and capabilities to work in a multidisciplinary team and you are 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.
- You have multi-market product development experience which includes consumer and/or regulated environment products like medical or similar.

Essential Technical Skills / Experience
1. Degree level qualification in Electronics Engineering or equivalent.
2. 8+ years of industry experience
3. Electronics Systems hardware design expertise for products at medium to high volumes i.e. have a good knowledge of EMC, DfM etc.
4. Broad electronics experience – analogue, digital, power supply, signal conditioning & sensors.
5. Schematic capture experience
6. Circuit simulation (LTSPICE or similar).
7. Circuit build, test & debug.
8. Strong reviewing rigor
9. Testing / Debugging / Troubleshooting of designs
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. Analogue circuit design including Analogue to Digital and Digital to Analogue systems
4. Wireless connectivity (including Bluetooth / BLE).
5. Serial communications – USB, RS232, SPI / I2C / 1-wire other serial bus protocols.
6. Familiar with analogue & digital sensors and interfacing to acquisition electronics.
7. Data acquisition and analysis techniques.
8. Experience in PCB layout.
9. EMC testing and troubleshooting.
10. Design for medical / regulated device.
11. Embedded software capable
12. IT networking.

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 'Senior Electronics Design Engineer' and include the following:

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