Position: Electronics & Systems Engineer

This is an outstanding opportunity to develop your career in a dynamic and rapidly growing design consultancy. Built around an ethos of building lasting partnerships between its leaders, people and 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.

An opportunity has arisen for an Electronics & Systems Engineer who will play an important role in building up our new electronics team. You will hold the first technical electronics position within i4, forming the basis of a team that will ultimately comprise a number of electronics hardware and firmware engineers to complement our mechanical engineering and product design expertise.

About You

We are seeking 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 development of medical products or in a similar regulated environment.

Key Responsibilities:

The initial remit for the role will be to:
- Take on a systems lead role for interdisciplinary projects involving electronics and mechanics, liaising with i4 in-house designers and sub-contract electronics hardware and firmware engineers.
- Review the work delivered by sub-contractors to ensure it meets functional and quality requirements.
- Review designs for ability to meet regulatory requirements, in particular EMC and safety.
- Work with clients to define detailed electronics & software requirements.
- Work with project managers to develop proposals and project plans.
- Provide some in-house electronics design capability. The focus of this design will be dependent on the individual (we can continue to outsource elements of work not within the individual's capability) but we would hope to find someone who can:
  - Design simple interface and interconnect circuits.
  - Source COTS modules, including analysis of datasheets against requirements and evaluation and test of modules.
  - Develop prototype systems for proof of concept work / early product prototypes (these systems are expected to be developed using a combination of off-the-shelf modules and custom hardware).
  - Develop test circuits / equipment for i4 internal development tests, including interfacing sensors / basic automation.
  - Implement firmware for such prototypes / test circuits.

It is expected that the role 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 or equivalent.
2. Embedded Systems, hardware and firmware capable.
3. Hardware design for real products at medium to high volumes i.e. have a good knowledge of EMC, DfM etc. to be able to ensure designs are suitable for manufacture and sale.
4. Broad electronics experience – analogue, digital & mixed signal.
5. Familiar with power supply architectures & options.
6. E-CAD fluent – schematic capture (experience of a few different systems preferred).
7. Circuit simulation (PSPICE or similar).
8. Firmware: C essential, C++ desirable.
9. Circuit build, test & debug.
10. Highly competent at MS Office (Excel, Word, PowerPoint).

Desired Technical Skills
1. Experience with Single Board Computers / Modules.
2. Wireless connectivity (in particular Bluetooth / BLE).
3. Serial communications – USB, RS232 / 485, SPI / I2C / 1-wire other serial bus protocols.
4. Familiar with analogue & digital sensors and interfacing to acquisition electronics.
5. Data acquisition and analysis techniques.
6. Knowledge of PCB layout.
7. 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 **'Electronics & Systems Engineer (ESE/01)'** and include the following:

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