HealthTech Placement Student (Software Engineering) Job Description

Role Purpose:

To contribute to the delivery and realisation of project work through preparation, development, research, design, testing and analysis work in line with team and business unit requirements. The HealthTech Placement Student (Software Engineering) will assist with development and improvement activities as a part of project delivery, working with technical supervision from their mentor, manager, and senior colleagues, using their own initiative where appropriate.

Key Responsibilities:

- Embrace and role model the desired behaviours to exemplify our Company values, promoting an ethical, positive company culture.
- To maintain consistent and documented compliance with all relevant Safety, Health and Environmental (SHE), Good Manufacturing Practice (GMP), Data Integrity (DI), quality and best practice requirements.
- To learn how to support work programmes with the development of firmware for the prototyping of rigid, flexible, and printed electronics, including wireless communications technologies such as Near Field Communication (NFC) and Bluetooth Low Energy (BLE).
- To learn how to actively use version control, modular design, and task management tools to ensure best working practices in firmware development.
- To learn how to build and maintain a network of relevant internal stakeholders, to represent self and the wider team as a credible professional in networks and groups.
- To learn how to keep up to date with developments in areas relevant to role, and/or legislative and SHE related changes, ensuring understanding of these and any associated new best practice, methods, or techniques.
- To learn how to support Business Development and Bid Proposal activities, to contribute to proposal / project development and direct customer engagement.
- To learn how to present and formally report experimental conclusions and supporting data for internal peer review and submission to clients, to agreed timescales and standards.
- To actively engage in hazard studies / SRA studies and discussions, as appropriate to role level.
- To set up, plan, and execute experimental runs and analyse, interpret, and report the results of these within agreed timescales and standards and in accordance with project requirements.
- To learn how to provide clearly documented records of technical data, decisions, methodologies, calculations, and software use in an agreed format.
- To take ownership in agreeing weekly workplans with line manager, mentor, project manager(s) and other relevant stakeholders, and delivering plan to agreed schedule.

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Good Manufacturing Practice - GMP

CPI have a responsibility to manufacture medicinal products of the requisite quality, fit for their intended use and be in accordance with the relevant Manufacturing and Marketing Authorisations, Clinical Trial Authorisation, Product Specification, Drug Master File or CEP Dossier as appropriate and which do not place patients at risk due to inadequate safety, quality or efficacy. The Pharmaceutical Quality System, which incorporates Good Manufacturing Practice, is designed to deliver this quality objective, the attainment of which requires the participation and commitment of all staff across departments and at all levels within the company.

Good Manufacturing Practice is the part of Quality Management which ensures that products are consistently produced to the correct quality standards. To comply with the principles of GMP, it is required that clearly defined procedures are adhered to when performing operations across CPI.

Data Integrity - DI

Data Integrity is the degree to which data are complete, consistent, accurate, trustworthy, reliable and that these characteristics of the data are maintained throughout the data life cycle. The data should be collected and maintained in a secure manner, so that they are attributable, legible, contemporaneously recorded, original (or a true copy) and accurate. Assuring data integrity requires appropriate quality and risk management systems, including adherence to sound scientific principles and good documentation practices.

CPI, as a GXP organisation, have developed a Pharmaceutical Quality System, which incorporates a DI Governance System – a series of arrangements to ensure that data, irrespective of the format in which they are generated, are recorded, processed, retained and used to ensure the record throughout the data lifecycle.

To comply with the principles of DI, it is required that clearly defined procedures are adhered to when performing operations across the site. All staff are actively encouraged/supported in the reporting of errors, omissions, and undesirable results.

Direct reports: No direct reports

Person Specification:

Education / Qualifications:

Essential:	Desirable:
Studying towards a Degree in Electronic Engineering/Computer Science/Embedded Systems or a related field.	Educated to A-Level (or equivalent) in Further Mathematics, or a related subject.

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Competencies and Behaviours	
Leadership (Core)	**Decision Making (Core)**
• Respects and values our diverse people and the differing talents, skills and backgrounds that they bring to projects and day-to-day work. • Has a positive influence on those they are in contact with. • Gains the respect and confidence of colleagues and supports them in achieving their goals and targets. • Aligns their behaviours and actions to our PRIDE values, vision and goals.	• Within area of expertise recognises, identifies and defines problems. • Generates and evaluates alternatives, draws conclusion and analyses risk. • Takes timely and correct action using established methods to ensure effective solutions are implemented by working as a team and with and focused outcomes to be delivered.
Communication (Core)	**Developing self and others (Core)**
• Communicates in a clear and concise manner, covering all relevant points in a timely manner. • Uses the appropriate route and format to communicate. • Confirms understanding of others communication. • Asks questions to understand other people's viewpoints, keeping an open mind and embracing new ideas.	• Knows own career aspirations and clearly communicates them to relevant colleagues whilst actively working to achieve goals. • Sets personal development goals and deploys strengths to achieve them. • Takes responsibility for one's own performance and actions, and invites and incorporates feedback from a variety of sources. • Regularly reflects on own capabilities to identify development priorities.
Collaboration (Core)	**Delivery (Core)**
• Establishes effective working relationships with other colleagues. • Builds and maintains a network of internal and external contacts. • Actively seeks, values and incorporates different views and ideas to broaden their prospective, embracing differing perspectives and unconventional ideas.	• Plans, prioritises and leads own area of work to deliver specified and agreed outcomes (time and standard). • Accurately scopes out length and difficulty of tasks, and repeatedly estimates correct amount of time needed for tasks. • Refers to lessons learnt from other projects/ tasks with related scope. • Acts with minimal supervision or direction by being purposely

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Competencies and Behaviours	
	empowered to make decisions when needed. • Pays attention to detail and delivers accurate and high quality outputs.

Knowledge and Experience:

Essential:	Desirable:
Has some technical knowledge through theory and practice, as well as evidence of technical problem solving. Has some understanding of the principles and practices involved in the development of embedded systems and products, including both hardware and firmware development, gained in academic or industrial environments. Has some understanding of the complete lifecycle of embedded systems in proof-of-concept applications, including specification, design, implementation, integration, testing, and documentation. Can demonstrate evidence of knowledge sharing and network building practices. Has the confidence to use their own judgement and initiative within standard engineering practices, as well as an understanding of when to seek advice from colleagues. Has some low-level programming experience (i.e., assembly, C, C++). Has some high-level programming experience (i.e., C#, Java). Has some experience of Linux platform development (e.g., Raspberry Pi with Python and/or C++).	Is a member of the IET. Has some working knowledge of the standard development environments and tools required for embedded development (i.e. ARM Keil uVision, IAR Embedded Workbench, SEGGER SES). Has some knowledge of developing with wireless communications technologies (i.e. RFID, NFC, ZigBee, WiFi, Bluetooth, LoRaWAN, LTE/LTE-M). Has some knowledge of developing with low-power short-range wired communications technologies (i.e. I2C, SPI, RS-232, RS-485). Has some knowledge of the hardware design process, including schematic design. Has some knowledge of IoT and/or Cloud programming solutions. Has some knowledge of printable/flexible electronics and their applications.

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Signature of Job Holder By signing this you confirm you have read, understood, and agree to work in alignment with the above job description.	
Printed name **Signature** **Date**	