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| 3P Innovation Job Description  |  |
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| **JOB TITLE:** | HMI Controls Systems Engineer |  | EMPLOYEES RESPONSIBLE FOR: | N/A |
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| REPORTING TO: | Controls Team Manager |  | DEPARTMENT:  | Controls |
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| LOCATION: | Warwick  |  | TRAVEL REQUIRED: | Approx. 5% per year |
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| Company Overview 3P innovation is Based at our office in Warwick. 3P innovation is a leader in the manufacture of automated machinery for the pharmaceutical, medical device and FMCG industries. See Recruitment Brochure for more details on careers with 3P Innovation. |
| JOb Purpose  The role requires a driven individual who is passionate about automation to work as part of a multi-disciplinary team creating bespoke automation solutions to solve our clients manufacturing and testing needs. This role will focus on HMI software design and development with responsibility for implementing best practice and ensuring usability, reliability, and compliance. You will be involved in all stages of the project lifecycle, from concept development and sales support through to commissioning, validation, and after-market supportYou will champion best practices in HMI software design, drawing on standards such as ISA-101, ISA-18, and ISA-88, while supporting high-quality delivery in compliance with cGMP, GAMP 5, FDA 21 CFR Part 11, and EU Annex 11. |
| Key responsbilities and Duties  |
| 1. Design and develop HMI software ensuring best practice and compliance with relevant regulations
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| 1. Collaborate with cross-functional teams and clients to understand and contribute to system requirements
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| 1. Produce high-quality project documentation, including Software Design Specifications (SDS), Test Records, O&M manuals, Software Release Notes, Disaster Recovery Plans
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| 1. Integrate HMI systems with PLCs, SCADA, and MES software using industrial communication protocols (e.g. OPC UA, Profinet, EtherCAT)
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| 1. Promote consistency and standardisation across HMI software development, contributing to internal libraries and reusable templates
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| Essential knowledge, Skills and Abiltiies * Must be fluent in both spoken and written English language
* Must be authorised and willing to travel internationally (Travel typically less than 5% of time)
* Working knowledge of industrial communication protocols such as OPC UA, Profinet, and EtherCAT
* Experience in the machine automation industry or industrial controls environments
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| **Desirable knowledge, Skills and Abiltiies** * Experience with HMI software platforms such as Zenon, WinCC, TwinCAT HMI
* Experience in regulated industries (especially pharmaceutical, biotech, or medical devices)
* Familiarity with GAMP 5 / FDA 21CFR Part 11 / Eu Annex 11 / cGMP
* Experience with SCADA / MES systems and integrating with enterprise-level infrastructure
* Working knowledge of HTML5, CSS, and database technologies
* Understanding of basic networking principles, including IP communication, security best practices, and common network devices
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| **Qualifications and Education Requirements** * 3+ years of experience designing PLC and HMI/SCADA software from scratch and making amendments/upgrades to existing systems.
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| **Our Values** (Principles) |
| Innovation | Experimentation: Embrace the continual development of new processes, ideas, and solutions. |
| Adaptability: Commit to learning and evolving in response to challenges. |
| Problem Solving: Foster an environment that encourages solutions and creative breakthroughs. |
| Collaboration | Learning and Sharing Knowledge: Knowledge shared is knowledge squared. Build collective expertise by exchanging information across teams. |
| Support and Teamwork: Actively work together, not just alongside, to achieve shared goals. |
| Clear and Open Communication: Effective collaboration requires clarity, transparency, and accountability. |
| Integrity | Trust and Accountability: Build and maintain confidence through transparency, honesty, and consistency. |
| Respect for Others: Foster a supportive and inclusive environment where all perspectives are valued. |
| Dependability and Openness: Ensure reliability in actions and openness in communication to strengthen relationships. |

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| **Subject to change**The responsibilities outlined above provide a general overview; however, additional duties may be assigned as necessary to meet departmental objectives. |