

Research Scientist 2 – Digital Technologies

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 Scientist/Engineer 2 will work using their own initiative and with some technical supervision from their manager and senior colleagues, assisting with development and improvement activities.

Key Responsibilities:

- To maintain consistent and documented compliance with all relevant Safety, Health and Environmental (SHE), quality and best practice requirements.
- 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 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 support in Business Development and Bid Proposal activities, to contribute to proposal / project development and direct customer engagement.
- 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 / pilot scale runs and analyse, interpret, and report the results of these within agreed timescales and standards and in accordance with project requirements.
- To be responsible for providing 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, project manager(s) and other relevant stakeholders, and delivering plan to agreed schedule.
- To be responsible for the maintenance and calibration of equipment to ensure it operates in a safe and efficient manner and is available to meet customer needs.

Responsibilities specific to role:

- To support and contribute to the planning and scoping of technical work programmes within the Digital strategy (e.g., model predictive control, process modelling, data analytics, application of digital technologies).
- To contribute and lead the technical delivery of programmes of work in the digital strategy.
- To keep up to date with research and techniques relevant to the digital space and to develop, implement and improve existing methods/technologies in the platform.
- To contribute to a culture of continuous development acting as an internal expert in data science using knowledge of principles and practices in the field to support non-data science colleagues.

Direct reports: No direct reports

Research Scientist 2 – Digital Technologies

Person specification

Education / Qualifications:

Essential:	Desirable:
<p>Educated to HNC or Foundation Degree level (or equivalent) in a Scientific/Engineering/Mathematical discipline plus significant industrial experience.</p> <p>Or</p> <p>Educated to Degree level (or equivalent) in a Scientific/Engineering/Mathematical discipline plus relevant industrial experience.</p>	<p>Chartered status with a relevant professional institution.</p> <p>Or</p> <p>Educated to Master's Degree level (or equivalent) in a Scientific/Engineering discipline (plus relevant industrial experience).</p> <p>Or</p> <p>Educated to PhD level (or equivalent) in a Scientific/Engineering discipline (plus some industrial experience).</p>

Competencies and behaviours	
Leadership (Core)	Decision Making (Enabling)
<ul style="list-style-type: none"> • Respects and values the diversity of talents, skills, and backgrounds that others bring to joint projects / work. • Has a positive influence on those in contact with. • Gains the respect and confidence of colleagues and supports them in achieving their goals and targets. • Aligns own behaviours and actions to CPI's values, vision, and goals. 	<ul style="list-style-type: none"> • Pro-actively identifies and prioritises the key issues involved to facilitate the decision-making process. • Seeks input from the relevant stakeholders when appropriate, considers risks, and takes accountability for the impact a decision may have on others. • Makes decisions in a timely manner. • Identifies the key factors in a complex problem.
Communication (Enabling)	Developing self and others (Enabling)
<ul style="list-style-type: none"> • Presents complex issues/ data with a high level of clarity and impact, using the appropriate format and driving action. • Can write clearly and succinctly recommendations and messages that have the desired effect. • Is aware of the impact of their communications and pro-actively seeks feedback for improvement. • Can influence others by preparing a reasoned argument to adopt a specific 	<ul style="list-style-type: none"> • Supports others in their development. • Is personally committed to, and actively seeks, opportunities to improve continuously. • Provides honest helpful feedback to others on their performance. • Insightful about self, strengths, and limitations, and how to maximise contribution.

Research Scientist 2 – Digital Technologies

tactics or plan, in line with strategy, and persuade other of the merit.	
Collaboration (Enabling)	Delivery (Enabling)
<ul style="list-style-type: none"> • Understands the value of establishing effective and supportive relationships, and collaborative working. • Actively listens, questions, and observes body language to understand communication from others. • Cultivates and maintains partnerships across departments to deliver value for the business 	<ul style="list-style-type: none"> • Prioritises activities based on their impact and strategic importance. • Takes responsibility and monitors own performance. • Can articulate how their work feeds into projects. • Creates and exploits useful metrics. • Displays commitment and engagement to own work. Pursues everything with energy, drive, and a need to finish, even when faced with setbacks or resistance.

Knowledge and Experience:

Essential:	Desirable:
<p>Will possess experience in one or more of the following from industry and/or academia:</p> <ul style="list-style-type: none"> • data science, processing, and analytics • process modelling or model predictive control • the application of machine learning • Use of coding languages relevant to background such as Python, R, Matlab. <p>Will possess willingness to learn new methods of data science and coding languages.</p> <p>Can evidence working independently or as part of a team to deliver technical projects.</p> <p>Can demonstrate evidence of knowledge sharing and network building practice across teams or groups.</p>	<p>Is a member of a relevant professional body.</p> <p>Will possess experience in a lab-based role from industry or academia.</p> <p>Knowledge or Experience in the application and use of digitally enabled technologies and industry 4.0.</p> <p>Experience with Design of Experiments (DOE), and Adaptive DOE.</p>

Research Scientist 2 – Digital Technologies

Has ability to apply theoretical and practical scientific methods to contribute to business activities.

Can provide examples of actively utilising cross-team collaboration to achieve desired results.

Has confidence to use own judgement and initiative within standard engineering / scientific practices, as well as an understanding of when to seek advice from colleagues.