Candidate Information

Position:	Digital Engineer - Systems Engineering
School/Department:	Northern Ireland Technology Centre (NITC)
Reference:	21/109451
Closing Date:	Wednesday 5 January 2022
Salary:	£34,304 - £40,927 per annum
Anticipated Interview Date:	Tuesday 18 February 2022
Duration:	Until 31 December 2023

JOB PURPOSE:

To support Digital Engineering activities within NITC's advanced manufacturing activities, utilising specialist knowledge and experience of methods and processes, to generate innovative research outputs which have a direct economic and technical benefit. Working collaboratively with academia, technology providers, national technology centres, and industry to deliver key projects focused on Advanced Manufacturing activities.

MAJOR DUTIES:

1. Apply technical knowledge and experience in support of the development of innovative and emerging industry focused solutions.
2. Development and implementation of smart factory technologies.
3. Document activities through formal high quality technical reports.
4. Engage with industrial partners to facilitate the transfer of NITC capabilities into commercial R&D teams.
5. Contribute to the planning, development, delivery, maintenance and trailing of NITC projects.
6. Produce high quality technical reports and demonstrations to assist in generating funding opportunities to support further program activity.
7. Carry out routine administrative tasks to ensure project goals are completed on time and within budget.
8. Undertake any other duties that may reasonably be requested by management.

Planning and Organising:

1. Plan own work to meet given objectives and processes.
2. Contributing to the project plan with responsibility for monitoring own specific deliverables to meet project objectives.
3. Liaise with other team members to plan and utilise shared resources in support of project objectives.

Resource Management Responsibilities:

1. Ensure research and development resources are used in an effective and efficient manner.
2. Provide guidance as required to staff and any students who may be assisting with the research project.

Internal and External Relationships:

1. Ensure research and development resources are used in an effective and efficient manner.
2. Coordinate and liaise with other members of the project team over work progress.

ESSENTIAL CRITERIA:

1. Honours degree in computing, engineering, science, or a related discipline with at least three years' relevant experience OR; Minimum HND in a related discipline with at least five years' relevant industrial experience.
2. A minimum of 2 years recent relevant experience in Machine learning and data analytics utilizing the python framework.
3. Demonstrable knowledge and/or experience in the operation and integration of shopfloor assets such as robots/Vision or tracker systems into a cyber digital twin.

4. Demonstrable evidence of the development of Digital Twin visualization from multiple resources including machine learning models.
5. Experience of using research tools and techniques resulting in high quality project and technical reports.
6. Ability to contribute to broader management and administrative processes.
7. Strong evidence of complex problem solving skills obtained / relevant for industrial data related problems.
8. Ability to innovate and rapidly contribute to research projects.

DESIRABLE CRITERIA:

1. Hold or be about to hold a relevant higher degree or Ph.D.
2. Evidence of working with international OEMs and SMEs.
3. Demonstrable experience in Digital supply chain ecosystem.
4. Direct experience in using either Machine learning, analytics or data manipulation.
5. Demonstrable experience with securing and creating value from industrially generated data for internal data driven decision making.
6. Evidence of strong resource management ability.
7. Ability to build contacts and participate in internal and external networks.
8. Experience of collaborative research and effective working in a team.