Candidate Information

Position:	Digital Engineer - Data/Internet of Things (IOT)
School/Department:	Northern Ireland Technology Centre (NITC)
Reference:	21/108639
Closing Date:	Monday 22 March 2021
Salary:	£33,797 - £40,322
Anticipated Interview Date:	Tuesday 13 April 2021
Duration:	33 months or until 31 December 2023 (whichever is soonest)

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 digital technology applications.
3. Development and implementation of smart factory technologies.
4. Formally evaluate the effectiveness of new or enhanced methods arising from research.
5. Document activities through formal high quality technical reports.
6. Engage with industrial partners to facilitate the transfer of NITC capabilities into commercial R&D teams.
7. Contribute to the planning, development, delivery, maintenance and trailing of NITC projects.
8. Participate constructively in multi-disciplinary research activities, including staff training and development.
9. Help develop the international reputation of NITC and QUB through presentations, attendance at trade-shows and visiting major companies and research & technology centres worldwide.
10. Produce high quality technical reports and demonstrations to assist in generating funding opportunities to support further programme activity.
11. Carry out routine administrative tasks to ensure project goals are completed on time and within budget.
12. 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 industrial experience OR;
   Minimum HND in a related discipline with at least five years' relevant industrial experience.
2. A minimum of 3 years recent relevant experience in an manufacturing environment (relevant is defined as the securing and contextualisation of data from multiple sources, development of Apps, preparing reports and dashboards.
3. Demonstrable knowledge and/or experience in one or more of the following:
   • Data harvesting - MES, ERP, SQL/No SQL Databases, Enterprise systems;and
   • Data Dashboarding - Enterprise and open source systems.
4. Proven ability in using Data driven decision making tools and techniques, specifically:
   • Multi source data decision making;
   • Role based alerting and insights;
   • Data driven machine control; and
   • Workflow development.
5. Strong evidence of working within multifaceted environments delivering to deadlines and within budget.
6. Experience of using research tools and techniques resulting in high quality project and technical reports.
7. Ability to contribute to broader management and administrative processes.
8. Strong evidence of complex problem solving skills obtained / relevant for industrial data related problems.
9. Good written and verbal communication skills.
10. Evidence of communicating complex technical information.
11. Demonstrable intellectual ability.
12. Ability to innovate and rapidly contribute to research projects.
13. Willingness to visit collaborative partners and to attend meetings and conferences nationally and internationally as requested.

DESIRABLE CRITERIA:

1. Hold or be about to obtain a relevant higher degree or Ph.D.
2. Evidence of working with international OEMs and SMEs.
3. Demonstrable experience in using commercial cloud or on prem storage or application containers
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.