

Candidate Information

Position:	Digital Engineer - Systems Engineering
School/Department:	Northern Ireland Technology Centre (NITC)
Reference:	21/108637
Closing Date:	Monday 22 March 2021
Salary:	£33,797 - £40,322 per annum
Anticipated Interview Date:	Monday 12 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:

 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 Manufacturing Execution Systems (MES) or low code systems development.
- 3. Demonstrable knowledge and/or experience in the integration of manufacturing applications with industrial systems such as IIOT platforms/PLM, MES or supply chain solutions.
- 4. Demonstrable evidence of competence in the architecture of data flow from multiple sources, development of Apps, reports and dashboards to communicate data effectively to end user.
- 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 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.