Candidate Information

Position:	Senior Engineer - Digital Engineer
School/Department:	AMIC
Reference:	24/111771
Closing Date:	Sunday 14 April 2024
Salary:	£37,841 - £49,317 per annum
Anticipated Interview Date:	Between Wednesday 24 and Tuesday 30 April 2024
Duration:	3 years in the first instance

AMIC

AMIC - A £100M investment through the Belfast Region City Deal - is a collaborative, innovative powerhouse of advanced manufacturing set to elevate our region globally.

We are supporting economic growth and prosperity for Northern Ireland by creating high quality jobs and increasing inward investment through high value manufacturing innovation clusters.

We are driving industrial transformation, paving the way for future technologies and competing globally with a more sustainable focus.

When you join our team, you will have access to the latest advanced industrial technologies and have the opportunity to grow and develop as an engineer and technology leader. Our mission is to provide you with the environment to innovate and create impact.

Our launch team of over 40 staff has core capabilities in digitalising manufacturing, smart design, sustainable polymers & composites and nanotechnologies & photonics. We are excited to be expanding the team throughout 2024.

JOB PURPOSE AND IMPACT:

We are seeking engineers who want to innovate and apply their knowledge to the challenges of industry and society to support Digital Engineering within AMIC's advanced manufacturing activities. You will apply your specialist knowledge and experience of methods and processes, to generate innovative research outputs which have a direct economic and technical benefit to companies and sectors. You will work collaboratively with your team, industry, technology providers, national technology centres and academia to deliver key projects focused on advanced manufacturing.

MAJOR DUTIES:

1. Apply technical knowledge and experience in support of the development of innovative and emerging industry-focused solutions.
2. Undertake high quality industrial research, development and knowledge transfer in the area of smart factory technologies.
3. Formally evaluate the effectiveness of new or enhanced methods arising from research.
4. Engage with industrial partners to facilitate the transfer of AMIC capabilities into commercial production / R&D teams.
5. Contribute to the planning, development, delivery, maintenance and trailing of AMIC projects, ensuring that all equipment is used in compliance with Health and Safety guidance.
6. Participate constructively in multi-disciplinary research activities, including staff training and development.
7. Help develop the international reputation of AMIC and QUB through presentations, attendance at trade-shows and visiting major companies and research & technology centres worldwide.
8. Produce high quality technical reports and demonstrations to assist in generating funding opportunities to support further programme activity.
9. Carry out routine administrative tasks to ensure project goals are completed on time and within budget.
10. Undertake any other duties that may reasonably be requested by management.

ESSENTIAL CRITERIA (Education, Experience, Skills, Knowledge, etc.):

1. Honours degree in computing, engineering, science, or a related discipline with significant relevant industrial experience OR; Minimum HND in a related discipline with extensive recent and relevant industrial experience.
2. Demonstrable recent relevant experience in a manufacturing environment (relevant is defined as the securing and contextualization of data from multiple sources, development of Apps, preparing reports and dashboards).
3. Demonstrable experience and knowledge in one or more of the following:
- Data harvesting – MES, ERP, SQL/No SQL Databases, Enterprise systems
- Data Dashboarding - Enterprise and open source systems.
4. Proven competence in data analysis and 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 process optimisation
- Workflow development
- General Programming skills and using Data languages (e.g.:Matlab, python, R)
- Demonstrated knowledge of/experience with data analysis tools such as Pandas, NumPy or similar.
5. Demonstrable evidence of working within multifaceted environments delivering to deadlines and within budget.
6. Experience of using research/industrial tools and techniques resulting in high quality projects and technical reports.

ESSENTIAL CRITERIA (Personal Qualities):
1. Evidence of complex problem-solving skills obtained / relevant for industrial data-related problems.
2. Ability to innovate and rapidly contribute to research projects.
3. Willingness to visit collaborative partners and to attend meetings and conferences nationally and internationally as requested.

DESIRABLE CRITERIA:
1. Postgraduate qualification in a relevant discipline.
2. Experience of collaborative research and effective working in a team.
3. Evidence of resource management.
4. Evidence of working with international OEMs and SMEs.
5. Demonstrable experience in using commercial cloud or on prem storage or application containers.
6. Direct experience in using machine learning, and other advanced data analytics techniques.
7. Direct experience in data manipulation and data visualisation.
8. Demonstrable experience with securing and creating value from industrially generated data for internal data driven decision making.