

# **Candidate Information**

Position: Senior Engineer, Digital Manufacturing (Discrete Events Simulation)

School/Department: AMIC Reference: 24/111769

Closing Date: Sunday 14 April 2024

**Salary:** £37,841 - £49,317 per annum

Anticipated Interview Date: Week Commencing 24 and/or 30 April 2024 (to be confirmed)

**Duration:** Fixed Term - 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're 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 Manufacturing 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 Digital Manufacturing processes, and in particular in one or more of the following technology areas:
- a. 3d factory Simulation
- b. Robotic Simulation
- c. Automation Simulation.
- 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 R&D teams.
- 5. Contribute to the planning, development, delivery, maintenance and trialling 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 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, or equivalent, in related engineering discipline with significant relevant experience in a manufacturing-related environment OR minimum HND in a related discipline with extensive recent and relevant industrial experience.
- 2. Demonstrable experience and in depth knowledge in the application of Digital Manufacturing simulation technology.
- 3. Experience in using Digital Manufacturing technology in Advanced Manufacturing.
- 4. Evidence of working within multifaceted environments delivering to deadlines and within budget.
- 5. Experience of using research/industrial tools and techniques resulting in high quality projects and technical reports.

### **PERSONAL QUALITIES**

- 1. Demonstrable evidence of complex problem-solving skills obtained / relevant for industrial manufacturing problems.
- 2. Excellent written and verbal communication skills, including ability to communicate complex technical information.
- 3. Ability to innovate and rapidly contribute to research projects.
- 4. 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. Experience of working with international OEMs and SMEs.
- 5. Experience in using commercial digital manufacturing/simulation software tools.
- 6. Demonstrable experience with securing and creating value from industrially generated data for internal data driven decision making.