Candidate Information

Position:	IT/OT Infrastructure Engineer
School/Department:	BRCD AMIC
Reference:	24/112335
Closing Date:	Monday 13 January 2025
Salary:	£39,922 - £47,631 per annum
Anticipated Interview Date:	Monday 27 January 2025
Duration:	3 years

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 Engineering activities 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. IT/OT Systems Integration:
• Design, implement, and maintain the integration of IT and OT systems across networks, devices, and platforms.
• Ensure seamless communication between industrial equipment (e.g., PLCs, SCADA systems) and enterprise systems (e.g., ERP, MES).
• Develop interfaces and protocols for data flow and real-time analytics, leveraging industrial standards like OPC UA, MQTT, or Modbus.
2. Network Design and Management:
• Plan and deploy robust and secure network architectures for IT/OT environments.
• Manage the configuration of LAN, WAN, VLANs, firewalls, and edge networks to ensure low-latency and secure connectivity.
• Implement and manage redundancy and failover mechanisms to ensure system availability.

3. Cybersecurity:
• Develop and implement cybersecurity measures to protect IT/OT infrastructure from potential threats.
• Monitor and respond to security incidents, ensuring compliance with standards.
• Conduct regular risk assessments and audits for IT/OT systems.

ESSENTIAL CRITERIA:

1. Honours degree or equivalent in computing, engineering 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 and relevant experience in IT/OT convergence methodologies.
3. A clear and strong understanding of any of the following DevOps, CI/CD, Git or SDLC (software development life cycle).
4. Strong knowledge of connectivity technologies – e.g. ethernet, Wi-Fi, cellular and other relevant IOT communication tech.
5. Demonstrable hands-on experience with configuration of network equipment, servers and industrial equipment with cyber security a key consideration.
6. Demonstrable evidence of competence in the configuration and maintenance of virtual machines and/or containerised applications.
7. Demonstrable experience in systems integration, data flow management, and automating workflows between separate software packages.
8. Demonstrable evidence of working within multifaceted environments delivering to deadlines and within budget.
9. Experience of using research/industrial tools and techniques resulting in high quality projects and technical reports.
10. Demonstrable evidence of complex problem-solving skills obtained / relevant for industrial data-related problems.
11. Excellent written and verbal communication skills, including ability to communicate complex technical information.
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. 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 Kubernetes, Orchestration or Hypervisors.
6. Demonstrable experience in Ansible.
7. Direct experience maintaining software licence servers.
8. Strong knowledge of and demonstrable experience of one or more of the following:
• API-based integration
• containerisation
• communication protocols (e.g. MQTT, OPC-UA)
9. Demonstrable experience with securing and creating value from industrially generated data for internal data driven decision making.