QUEEN'S UNIVERSITY BELFAST

Candidate Information

Position:	Senior Manufacturing Engineer - Automation, Robotics & Control
School/Department:	Northern Ireland Technology Centre (NITC)
Reference:	19/108041
Closing Date:	Monday 27 January 2020
Salary:	£41,526 to £51,034 per annum.
Anticipated Interview Date:	Thursday 20 February 2020
Duration:	This is a 30-month contract with a strict funding end date of 30 September 2022.

JOB PURPOSE:

To play a major role in the management and expansion of applied research, development, Innovation and knowledge transfer within the NITC, and in particular Automation & Robotics, that will have a direct technical, economic and reputational benefit to NITC, including the raising of funding from industry and major government sources (nationally and internationally). To develop international links and work closely with industry and government agencies. This includes supporting inward investment and supporting both indigenous and multi-national companies in all aspects of research and technology transfer, industrial and economic development. To undertake research, design and research-support activities in Automation & Robotics, working in collaboration with technology providers, national technology centres, academia and industry to deliver key projects. To support and develop Automation & Robotics strategies for the NITC and industry alike.

MAJOR DUTIES:

1. To initiate, undertake, manage and supervise research and development in Automation & Robotics of the highest international quality, to sustainably grow NITC alongside Queen's academic Schools as a world class centre that successfully combines leading edge research with knowledge transfer, commercialisation and economic impact.
2. Manage and provide leadership for multi-disciplinary research projects and related activities, including all aspects of staff training and development.
3. Work collaboratively with industry to plan and deliver key projects related to Automation & Robotics, ensuring quality of delivery at all times.
4. To work closely with NITC staff, technology providers, national centres, Queen's academic staff, with industry and government agencies in all aspects relating to technology transfer.
5. Assist in winning funding from industry and government sources (nationally and internationally) to grow manufacturing research in line with NITC's long term strategic plans.
6. To work closely with senior academic staff to create new cross-disciplinary groupings and projects of strategic importance to the Faculty of Engineering and Physical Sciences at Queen's University Belfast.
7. To work closely with senior academic staff to create and deliver best-in-class applied undergraduate, postgraduate and continuous professional development courses in Automation & Robotics for the Faculty of Engineering and Physical Sciences.
8. To attract funding from and promote linkages with major companies locally, nationally and internationally, including the two-way exchange of staff, students and researchers.
9. Play a leading role in developing the international reputation of Automation & Robotics research at Queen's through presentations, attendance at trade shows and through visiting major companies world-wide as required.
10. Carry out routine administrative tasks to ensure project/s are completed on time and within budget.
11. Any other duties that may reasonably be requested by management.

Planning and Organising:

1. Plan, schedule and monitor work activities in order to meet time and quality targets.
2. Plan for the use of research resources and laboratories where appropriate.

Resource Management Responsibilities:

1. Responsibility for a significant area of work, including technical, financial and quality aspects.
2. Ensure research and development resources are used in an effective and efficient manner.
3. Provide guidance as required to staff and any students who may be assisting with the research project.

Internal and External Relationships:

1. Assist with developing high-level relationships with customers, suppliers and industry leaders.
2. Liaise on a regular basis with QUB academic staff, with industry and government agencies.
3. Coordinate and liaise with other members of the project team over work progress.

ESSENTIAL CRITERIA:

1. Honours Degree, or equivalent, in related engineering discipline.
2. At least ten years' relevant experience.
3. Strong evidence of complex problem solving skills in an industrial environment.
4. Experience of collaborative working in large multidisciplinary research and development teams.
5. Strong evidence of initiating, executing and managing industrial and/or research projects.
6. Strong evidence of technical excellence and understanding of fundamental engineering concepts as evidenced by major reports, publications, patents or product designs.
7. Proven competence in the theory and implementation of Automation & Robotics with experience using relevant software packages; simulation, control & programming.
8. Competent in the application of Automation and Robotics manufacturing equipment for with demonstrable case studies.
9. Evidence of the ability to produce high quality project reports, and the ability to assist in raising substantial funding to support the activities of the research group.
10. Evidence of leading and delivering on multifaceted projects within deadlines and budget, displaying strong resource management ability.

DESIRABLE CRITERIA:

1. Hold a Ph.D. in a relevant discipline plus three years' R and D experience (obtained in industry and/or academia in a relevant area).
2. Experience of working with international OEMs and SMEs.
3. Experience of using global leading Advanced Machining software from Dassault Systems and/or Visual components.
4. Familiarity with the theory and application of process mapping, Lean thinking and modern manufacturing philosophies.
5. Familiarity with process cost estimating / modelling, costing philosophies.
6. Experience with manufacturing automation.
7. Experience in data analysis and interpretation.
8. Experience in building and developing teams.