



Candidate Information

Position:	AICC Research and Development Lead
School/Department:	Estates
Reference:	24/112076
Closing Date:	Monday 26 August 2024
Anticipated Interview Date:	Friday 20 September 2024
Duration:	Fixed Term - Full Time available for approx. 45 months

JOB PURPOSE:

The Artificial Intelligence Collaboration Centre (AiCC) is a £16.3M investment by InvestNI and the Department for the Economy to create a partnership between Ulster University and Queen's University based predominantly in Belfast and Derry/Londonderry.

The AiCC has the aim of increasing the use of AI by local companies in Northern Ireland by collaborating on a series of applied research projects. It offers an exciting opportunity for the successful candidates to join a world class research activity and engage with a wide range of academics involved in applying AI to company problems and to work on an exciting range of challenging projects.

As a member of the AiCC team you will take a leadership role, developing a strategy for emerging AI opportunities and managing the machine learning and data analysis section of AiCC in the areas of: visual analytics, data cleansing, time series analysis, machine learning, digital twins, predictive analytics, data analysis techniques.

This role is supported by AI Futures Grants, a UK Government scheme designed to help the next generation of AI leaders meet the costs of relocating to the UK. AI Futures Grants provide financial support to reimburse relocation costs such as visa fees, the immigration health surcharge and travel/subsistence expenses. Successful candidates for this role may be able to get up to £10,000 to meet relocations costs, subject to terms and conditions.

MAJOR DUTIES:

1. Responsible for designing, developing and leading advanced collaborative research and development projects with companies in areas listed above.
2. Supervise the analysis and interpretation of vast amounts of data and oversee the design and development of proof of concept algorithms and implementation of AI algorithms for a range of application challenges established by, and in consultation with, local companies and/or AICC senior staff, or relevant university academic staff.
3. Manage objectives and set key deadlines for members of the AiCC team.
4. Build mutually beneficial partnerships and collaborative opportunities with key partners with the aim of exploring how AI could improve their processes and operation.
5. Set the agenda for analyses, critical evaluations, and interpretations of experimental data and the literature using methodologies and other techniques appropriate to area of research, to allow demonstration of the proposed approach and undertake performance evaluation and comparison against competitive, state-of-the-art approaches.
6. Prepare and produce a range of high quality outputs including articles, research papers, reports consistent with project aims. This will include collaborating and co-authoring with PI, project team and external collaborators (as appropriate) on outputs.
7. Engage with business development staff in other groups across the university, including Belfast Regional City Deal units including Momentum1.0, Advanced Manufacturing Innovation Centre, iREACH and other externally facing units, to identify future opportunities.
8. Prepare reports, articles, funding proposals and applications to external bodies.
9. Undertake supplementary duties relevant to the success of the project including administrative duties and additional training and development activities as required.

ESSENTIAL CRITERIA:

1. A degree in computer science, electrical/electronic engineering, physics or related area.
2. Substantial relevant experience to include the following:
 - Leading the development of practical and innovative solutions that incorporate artificial intelligence/machine learning techniques to a range of practical applications.
 - Detailed knowledge of advanced and emerging AI and machine learning algorithms.
 - Detailed knowledge of modelling, software or hardware implementation of artificial intelligence/machine learning techniques.
 - Detailed knowledge and demonstrable expertise in at least one of the following areas: visual analytics, data cleansing, time series analysis, machine learning, digital twins, predictive analytics or data analysis techniques.
 - Proven track record of undertaking analyses, critical evaluation and interpretations of experimental data.
 - Experience of effective leadership, management and delivery of projects.
3. Substantial relevant experience to include the following (continued):
 - Preparation of successful funding applications.
 - Demonstrable track record of working collaboratively to develop innovative solutions.
4. Practical problem solving skills, independence of thought and initiative.
5. Ability to communicate complex information in English effectively in oral and written format.
6. Ability to build relationships to develop internal and external networks.

DESIRABLE CRITERIA:

1. A PhD in a relevant area.
2. Strong publication record commensurate with stage of career.
3. Development of major products incorporating advanced functionality.
4. Evidence of Participation in UKRI projects.