



Research Centre Insight SFI Research Centre for Data Analytics

Post Title Research Assistant - Software engineering

Post Duration Fixed Term Contract up to 11 Months

Dublin City University

Dublin City University (DCU) is a leading innovative European University. It is proud to be one of the world's leading Young Universities and is among the world's top 2% globally. DCU is known as Ireland's University of Impact, with a mission to 'transform lives and societies' and focuses on addressing global challenges in collaboration with key national and international partners and stakeholders.

DCU has over 20,000 students in five faculties spread across three academic campuses in the Glasnevin-Drumcondra area of North Dublin. Thanks to its innovative approach to teaching and learning, the University offers a 'transformative student experience' that helps to develop highly sought-after graduates. DCU is currently No. 1 in Ireland for Graduate Employment Rate, and for graduate income (CSO).

DCU is a research-intensive University and is home to a number of SFI-funded Research Centres. The University participates in a range of European and international research partnerships. DCU is also the leading Irish university in the area of technology transfer as reflected by licensing of intellectual property.

As a 'People First' institution, DCU is committed to Equality, Diversity and Inclusion - a University that helps staff and students to thrive. The University is a leader in terms of its work to increase access to education, and is placed in the world's Top 10 for reducing inequalities in the Times Higher Education Impact Rankings.

The Insight SFI Research Centre for Data Analytics

The Insight SFI Research Centre for Data Analytics (<http://www.insight-centre.org>) is a joint initiative between researchers at University College Dublin, NUI Galway, University College Cork, and Dublin City University, as well as other partner institutions. It brings together a critical mass of more than 400 researchers from Ireland's leading ICT centres to develop a new generation of data analytics technologies in a number of key application areas.

The €150m Centre is funded by Science Foundation Ireland and a wide range of industry partners. Insight's research focus encompasses a broad range of data analytics technologies from machine learning, decision analytics and social network analysis to linked data, recommender systems and the sensor web. Together, with more than 220 partner companies, Insight researchers are solving critical challenges in the areas of Connected Health and the Discovery Economy.

The Project and Role Profile

There are two projects currently going on: (1) investigating how some of the negative effects of over-reliance to our day-to-day apps/services/systems could be mitigated by re-thinking and re-designing the conventional usability principles and UI guidelines by a series of UI/UX design exercises with the target platforms including web apps and smartphone apps, progressed into 1 year, and (2) designing usable menu navigation interaction for VR/AR environment, starting in September 2022.

Since both above projects require design, implementation and usability testing of apps/services, the role of the Research Assistant is to quickly implement (programme) the interactive prototypes designed by the team, so that they can be tested with real users. Test outcomes will be used to refine the designs, and the modifications will have to be implemented to the prototypes so that the team can go through the refinements in multiple iterations. Thus, the role requires a strong software engineering, system-building skill including the front-end user-interfaces for smartphone and AR/VR. Experience in building interactive apps for mobile and AR/VR and the use of Unity will be a plus.

Duties and Responsibilities: Principal Duties and Responsibilities

Specific duties include:

- Be involved in the team's discussions on prototype UI design from the technical point of view.
- Implement/programme the agreed-upon prototype systems or apps, iteratively refining the systems in multiple stages.
- Understand design requirements to convert them to implementation decisions that meet the main investigators' needs.
- Ensure technical feasibility of UI/UX designs.
- Conduct functional tests on implemented prototypes, identify bugs and resolve them (if any).
- Assist the main investigators in conducting usability testing with the prototypes.
- Assist the main investigators in writing papers especially describing the technical aspects of the prototype systems.
- Participate in other Insight Centre activities as requested.

Qualifications, Skills and Experience Required

Candidates must hold a primary degree (NFQ Level 8) in a relevant discipline and should have at least 1 year of hands-on relevant experience.

Candidates will ideally have the following skills:

- Excellent written and oral proficiency in English (essential).
- Excellent written and verbal communication and interpersonal skills.
- Proven ability to prioritize workload and work to strict deadlines.
- Ability to work in a team and to take responsibility to contribute to the overall success of the team.
- Strong problem solving abilities.

Essential Training

The post holder will be required to undertake the following mandatory compliance training: Orientation, Health and Safety, Research Integrity and Intellectual Property and Data Protection training. Other training may need to be undertaken when required.