

Research Centre	Insight SFI Research Centre for Data Analytics
Post Title	Research Assistant in App Development (MobileARVR)
Post Duration	Fixed Term Contract up to 11 months

Dublin City University

Dublin City University (DCU) is a young, ambitious and vibrant university, with a mission ‘to transform lives and societies through education, research, innovation and engagement’. Known as Ireland’s ‘University of Enterprise’, DCU is a values-based institution, committed to the delivery of impact for the public good. DCU was named Sunday Times Irish University of the Year 2021.

DCU is based on three academic campuses in the Glasnevin-Drumcondra region of north Dublin. More than 18,000 students are enrolled across five faculties – Science and Health, DCU Business School, Computing and Engineering, Humanities and Social Sciences and DCU Institute of Education.

DCU is committed to excellence across all its activities. This is demonstrated by its world-class research initiatives, its cutting-edge approach to teaching and learning, its focus on delivering a transformative student experience, and its positive social and economic impact. The university continues to develop innovative programmes in collaboration with industry, such as the DCU Futures suite of degrees, which are designed to equip graduates with the skills and knowledge required in a rapidly evolving economy.

DCU’s pursuit of excellence has led to its current ranking among the top 2% of universities globally. It is also one of the world’s Top Young Universities (QS Top 100 Under 50, Times Higher Top 150 Under 100). In the Times Higher Education University Impact Rankings 2021, DCU ranked 23rd in the world for its approach to widening participation in higher education and its ongoing commitment to eradicating poverty, while it ranks 38th globally for its work in reducing inequality and 89th globally for gender equality.

The university is ranked 23rd in the world and first in Ireland for its graduate employment rate, according to the 2020 QS Graduate Employability Rankings. Over the past decade, DCU has been the leading Irish university in the area of technology transfer, as reflected by licensing of intellectual property.

The Insight SFI Research Centre for Data Analytics

The Insight SFI Research Centre for Data Analytics (<http://www.insight-centre.org>) is an SFI funded Research Centre which brings together researchers from University College Dublin, NUI Galway, University College Cork, and Dublin City University, as well as other partner institutions, Trinity College Dublin (TCD), University of Limerick (UL), Maynooth University (MU) and Tyndall National Institute. It creates a critical mass of more than 400 researchers from Ireland's leading ICT clusters to carry out research on a new generation of data analytics technologies in a number of key application domain areas, such as Health and Human Performance, Smart Communities, Internet of Things, Enterprise and Services and Sustainability and Operations.

The €150m Centre is funded by Science Foundation Ireland and a wide range of industry and European Union 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

There are two projects on-going: (1) investigating how some of the negative effects of over-reliance on 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.

Role Profile

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.

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, 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

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

Skills

- Excellent software engineering and programming skill (essential), especially experience in building front-end systems for mobile apps and AR/VR apps using Unity.
- Good 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.

Mandatory 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.

Additional Information

The successful candidates will be offered opportunities for developing their own careers in a number of directions including support for conference/workshop travel, upskilling through Insight's continuous professional development in areas like research ethics and data privacy, student supervision and development and submission of their own research project proposals.

Dublin City University is an equal opportunities employer.

In line with the Employment Equality Acts 1998 – 2015, the University is committed to equality of treatment for all those who engage with its recruitment, selection and appointment processes.

The University's Athena SWAN Bronze Award signifies the University's commitment to promoting gender equality and addressing any gender pay gaps. Information on a range of university policies aimed at creating a supportive and flexible work environment are available in the [DCU Policy Starter Packs](#)