



Research Centre for Data Analytics
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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 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 multiple projects ongoing. One of them is to visualise the bibliographic data of publications by the Insight Centre's researchers, allowing to intuitively see the patterns of data in terms of authors' genders, research topics, connections amongst researchers, and so on; another is to visualise a large number of sports club activities in Ireland during Covid-19 pandemic period, in order to gain insights on correlations among various factors such as locality, age groups, genders, etc. Other projects include designing user-interfaces that will reduce negative cognitive effects to the users when used long-term and designing the interactivity within VR environment.

The Role

Across these projects, the role of the Research Assistant is to be involved in the discussions and progress in the projects and contribute in terms of brainstorming, generating new ideas, quickly sketching and prototyping to test the ideas, conduct comprehensive literature review to help guide the direction of the discussions in the right way, and to write the reports and papers accordingly. Thus the role requires a strong research skill including literature search, reading, writing, discussing, willingness to explore new concepts, framing the issues in novel ways, ideating and sketching, presenting them to the team and using the feedback to refine the ideas and sketches, along the way generating a series of new ideas, design sketches, reports and publications.

Principle Duties and Responsibilities

Specific duties include:

- Be involved in the projects' discussion on visualising the data and designing the userinterfaces.
- Investigate the topics raised in the discussions by self-guided literature search, reading, and initiating further discussions from the design/usability point of view.
- Quickly sketch the ideas using appropriate tools (pen and paper, PowerPoint, Photoshop, Origami, InVision, Sketch, Figma, Adobe Creative Suite, etc.) and share.
- Initiate discussions over the sketches to receive feedback and comments and refine the ideas and sketches iteratively.
- Document the ideas discussed and generated, design rationale and literature review.
- Assist the main investigators in conducting usability testing.
- Assist the main investigators in writing papers.
- 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 have 1 year of hands-on relevant experience.

Skills

- Experience in interaction design, sketching visualisations of data/user-interfaces.
- Experience in using sketching/prototyping tools (e.g. Adobe Creative Suite, Figma, etc.).
- Knowledge in Human-Computer Interaction and usability, user-interface design.
- Excellent literature search and review skill (searching online to identify relevant papers/books, review them to understand the state-of-the-art, compiling a reference list, etc.).
- Experience in writing technical reports and papers.
- 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.

Essential Training

The postholder will be required to undertake the following essential compliance training: Orientation, Health & Safety, Data Protection (GDPR) and all Cyber Security Awareness 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 <u>DCU Policy Starter Packs</u>