



Research Centre	Insight SFI Research Centre for Data Analytics
Post title	Postdoctoral Researcher Information Systems Analyst
Level on Framework	Level 1
Post duration	Fixed Term Contract up to 12 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.

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

The RECONNECT project, funded by Enterprise Ireland under the Digital for Resilience Challenge is focused on addressing the lack of interoperability among existing healthcare systems. This has created a barrier to effective decision support for healthcare staff and decision makers. RECONNECT offers practical benefits for those groups with the most complex clinical presentations and with the greatest ongoing need for health services, who are particularly vulnerable to any additional shocks to the health ecosystem (high risk patients). More information is available here:

https://www.sfi.ie/challenges/digital-for-resilience/reconnect/

The Role

Working closely with the PIs, the core research team and stakeholders, the researcher will support a range of activities related to:

- Describing and understanding the current health data architecture in Ireland.
- Obtaining ethical approval for research, undertaking qualitative interviews.
- Stakeholder engagement.
- Health services and policy research.
- Modelling, risk prediction, comparative effectiveness.
- Collaborate engagement with internal and external partners.

The successful candidate will join an interdisciplinary team and will be the lead researcher on a project on developing a digital solution to the fractured health data infrastructure.

Principal Duties and Responsibilities

Specific duties include:

- Conduct a programme of research into the information requirements of clinical staff in Direct/indirect Patient Care Decision Support, Service activity metrics Analytical Support, Planning, Monitoring and Evaluation Support, and Generation of new knowledge through scientific methodologies.
- Carry out administrative work associated with the programme of research as necessary.

- Preparation of project outputs, interim and final reports as required by the project schedule.
- Assist the Principal Investigators (PIs) in preparing questionnaires and interviews with healthcare staff and stakeholders.
- Take an active part in the SFI training programmes specific to this funding award and liaise with Project Leads on how to apply the learning outcomes to the healthcare sector.
- Take an active part in the SFI mentoring programme and liaise with Project to determine where guidance can be applied to implement change.
- Provide support and advice to PhD students and junior researchers working on similar topics.
- Produce top quality journal and conference publications, in collaboration with the PIs.
- Participate in Insight Centre activities, including industry showcases, annual reviews and industry and agency visits to the Insight labs.
- Other tasks relevant to successfully implementing the assigned research programme.
- Liaise with both external and internal stakeholders, including academics, undergraduate and postgraduate students, external supervisors and host placement schools.
- Deliver research outputs according to project schedules.
- Other tasks relevant to successfully implementing the assigned research programme.
- Attend and present results at project progress meetings.

Qualifications, Skills and Experience Required

The successful candidate will have a PhD in Public Health, Epidemiology, Health Services Research, Biostatistics, Statistics, Computer Science or similar.

In addition, it is desirable that the candidate has a subset of the following skills and experience:

- Clinical epidemiology.
- Chronic disease prevention and effectiveness research.
- Health services and policy research.
- Mixed methods research.
- Biostatistics, machine learning and data science.
- Health impact and cost-effectiveness modelling.

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.

Candidates will be assessed on the following competencies:

Discipline knowledge and Research skills – Demonstrates knowledge of a research discipline and the ability to conduct a specific programme of research within that discipline.

Understanding the Research Environment – Demonstrates an awareness of the research environment (for example funding bodies) and the ability to contribute to grant applications.

Communicating Research – Demonstrates the ability to communicate their research with their peers and the wider research community (for example presenting at conferences and publishing research in relevant journals) and the potential to teach and tutor students.

Managing & Leadership skills - Demonstrates the potential to manage a research project including the supervision of undergraduate students.

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.

In addition to inhouse training provided by DCU under the DCU Research Career Framework, extensive training is also provided by SFI in the areas of Design Thinking, Evidence Based entrepreneurship and Communications skills.

Research Career Framework

As part of this role the researcher will be required to participate in the DCU Research Career Framework (http://dcu.ie/hr/ResearchersFramework/index.shtml). This framework is designed to provide significant professional development opportunities to researchers and offer the best opportunities in terms of a wider career path.

DCU has a strong track record in attracting both Irish and European Union research funding under Horizon 2020 (and all previous Framework programmes), Marie Curie Actions and Erasmus. We offer a dynamic and internationally focused environment in which you can advance your academic career.

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>