Applications are invited from suitably qualified candidates for the following position:

Research Centre	Insight SFI Research Centre for Data Analytics
Post title	Postdoctoral Researcher in Neuro-symbolic Artificial Intelligence, Explainable AI and Graph Analysis
Level on Framework	Level 2
Post duration	12 Month Fixed Term Contract

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 Role

We are looking for a postdoctoral researcher to conduct research into the use of neuro-symbolic approaches to representation learning aimed at the generation and evaluation of explainable AI in computer vision and natural language processing. Specifically, the post-doctoral researcher will look into knowledge graphs and graph analysis approaches to generate explainable representation of state-of-the-art deep representations in both computer vision and Natural Language Processing.

Principal Duties and Responsibilities

Please see attached job description for principal duties and responsibilities of the role.

Qualifications, Skills and Experience Required

The candidates should have a PhD in Computer Science and Artificial Intelligence. In addition, it is desirable that the candidate has experience in Knowledge Graphs Construction and processing (including graph analysis), experimental evaluation of state-of-the-art deep learning architecture for computer vision and natural language processing.

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.

Salary Scale: IUA Postdoctoral Researcher Salary Scale - €42,783 - €54,965
Please refer to DCU Pay scales for the applicable pay scale.

**Appointment will be commensurate with qualifications and experience will be made on the appropriate point of the salary scale, in line with current Government pay policy.*

Closing date: Friday, 20th October 2023

For more information on DCU and benefits, please visit Why work at DCU?

Informal Enquiries in relation to this role should be directed to:
Dr. Alessandra Mileo, Associate Professor and Principal Investigator, School of Computing and INSIGHT Centre for Data Analytics, Dublin City University.
Email: alessandra.mileo@insight-centre.org

*Please do not send applications to this email address, instead apply as described below.

Application Procedure:

Application forms are available from the DCU Current Vacancies website at https://www.dcu.ie/hr/vacancies-current-vacancies-external-applicants

Applications should be submitted by e-mail with your completed application form to hr.applications@dcu.ie

Please clearly state the role that you are applying for in your application and email subject line: Job Ref #RF1915 Postdoctoral Researcher in Neuro-symbolic Artificial Intelligence, Explainable AI, Graph Analysis.

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