Research Centre	ADAPT Centre, School of Computing
Post title	Postdoctoral Researcher in Automating Policy Compliance
Level on Framework	Level 1
Post duration	Two Year Fixed Term

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.

As part of this role the researcher will be required to participate in the DCU Research Career Framework. This framework is designed to provide significant professional development opportunities to Researchers and offer the best opportunities in terms of a wider career path.

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Overview of the Department

ADAPT is the world leading SFI research centre for AI Driven Digital Content Technology hosted by Trinity College Dublin. ADAPT's partner institutions include Dublin City University, University College Dublin, Technological University Dublin, Maynooth University, Munster Technological University, Athlone Institute of Technology, and the National University of Ireland Galway. ADAPT's research vision is to pioneer new forms of proactive, scalable, and integrated AI-driven Digital Content Technology that empower individuals and society to engage in digital experiences with control, inclusion, and accountability with the long-term goal of a balanced digital society by 2030. ADAPT is pioneering new Human Centric AI techniques and technologies including personalisation, natural language processing, data analytics, intelligent machine translation human-computer interaction, as well as setting the standards for data governance, privacy and ethics for digital content.

Since launching, ADAPT's researchers have signed 43 collaborative research projects, 52 licence agreements and oversee 16 active commercialisation funds and 52 commercialisation awards. ADAPT has won 40 competitive EU research projects and obtained €18.5 million in non-exchequer noncommercial funding. Additionally, six spinout companies have been formed. ADAPT's researchers have produced over 1,500 journal and conference publications. Nearly 100 PhD students have been trained.

ADAPT's breakthrough technologies and research applications AI for Media Interaction, Digital Humanities, Health, Data governance, and Fintech are being applied across multiple industry domains, expertly facilitated through the ADAPT Design and Innovation Lab (dLab) to deliver product and service innovation. ADAPT's Start-up & Development team fosters and steers collaborations between researchers and AI entrepreneurs from start-up to successful spinout.

Role Profile

The ADAPT Centre seeks to appoint a Post-Doctoral Researcher to work on a project involving the creation and utilisation of tools that utilise machine-readable semantics and LLMs to assist with policy documentation, discovery, and enforcement workflows. This project is a collaboration between ADAPT and an industry partner., and the Researcher will be mainly based in the ADAPT Centre within Dublin City University. The Researcher will work on a project involving developing a Machine-readable Data Policy Specification based on standards (RDF, ODRL), exploring its use to represent data policy workflows (e.g. under GDPR), explore the use of LLMs to assist in generating structured information, and to develop tools and techniques for policy enforcement (e.g. ensure workflows align with data processing agreements).

The open position corresponds to the work on one or more of the following topics:

1. Developing a machine-readable policy specification
2. Exploring potential of LLMs to assist with using the policy in documentation
3. Developing a policy enforcement tool to apply the developed specification

Duties and Responsibilities
- Manage and conduct the research under the leadership of the Principal Investigator
- Disseminating outcomes of research through project reports as well as peer-reviewed academic publications, technical reports, industry and public events, and other channels.
- Assist in the further development of research potential by pursuing external funding.
- Where relevant to the research topic, and within the bounds of DCU policies, assist in co-supervising graduate and postgraduate research students.
- Administrative and management tasks associated with the project.
- Carry out any other duties within the scope and purpose of the job as requested by the PI.
- Comply with all ADAPT and DCU policies and regulations, including those in relation to Research Ethics and Health and Safety.

Minimum Criteria
Applicants should have a PhD in Computer Science or equivalent. In addition, it is desirable that the candidate has experience in:

Knowledge and Experience
- A strong background in use of semantic web, developing ontologies and applications that use querying (e.g. SPARQL), reasoning, and validation (e.g. SHACL) (essential)
- Knowledge or awareness of privacy and data protection regulations such as GDPR (ideal)
- Knowledge of Data Privacy Vocabulary (DPV) (ideal)
- Experience in using and developing applications with LLMs designing and developing (ideal)
- Evidence of a research profile and publication record (essential)
- Knowledge of research techniques and methodologies (essential)
- Capability for demonstrable high quality research (essential)
- Experience working on collaborative projects (ideal)

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

Application Procedure:
Please submit your application through the online system. In order to be considered for the role to which you are applying for, you must upload:
1) Curriculum Vitae
2) Cover Letter
3) Completed application form (blank forms can be downloaded from the Vacancy Detail tab on the menu on the left hand side).

Please note, if all items are not uploaded, the application will be deemed incomplete, and will not be processed.