



**Engaging Content**  
Engaging People

Applications are invited from suitably qualified candidates for the following position

**Research Assistant**  
**ADAPT Centre**  
**Fixed Term up to 17 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.

**Overview of the department**

The ADAPT Centre, a world-leading SFI Centre, is Ireland's global centre of excellence for digital content technology funded through Science Foundation Ireland's Centres programme. ADAPT combines the expertise of over 300 researchers across eight Higher Education Institutes (Trinity College Dublin, Dublin City University, University College Dublin, Technological University Dublin, Munster Technological University, Athlone Institute of Technology, Maynooth University, and

National University of Ireland, Galway) with that of its industry partners to produce ground-breaking digital content innovations.

The ADAPT Centre executive function is co-hosted between Trinity College Dublin and Dublin City University. ADAPT brings together more than 300 researchers who collectively have won more than €100m in funding and have a strong track record of transferring world-leading research and innovations to more than 140 companies. ADAPT partners are successfully advancing the frontiers of Artificial Intelligence (AI), content analysis, machine translation, personalisation, e-learning and education, media technologies, virtual and augmented reality, and spoken interaction, as well as driving global standards in content technologies.

### **The Project**

The PUMAS team plans to develop new technologies that collect both explicit and implicit knowledge from users. These technologies will generate intelligent profiles that organize and aggregate the accumulated explicit and implicit data from existing platforms. Additionally, PUMAS aims to improve team building processes by leveraging AI learning to optimize rankings, increase effectiveness, streamline manual work, map critical success factors, and evaluate performance through AI technologies.

### **Role Profile**

The successful candidate will work within a group of Academics and Researchers comprising the PUMAS project team based in the ADAPT Centre in the School of Computing at DCU. Their main tasks include:

- Moving data from one or more sources to a target site for further processing and examination.
- Build a facet filter and search function based on the specified criteria.
- Design scoring framework for PUMAS ranking process.
- Deploying the current SoA embedding knowledge graph (from the latest academic literature) to realise the range of functionality envisaged for the toolkit would result in sub-optimal accuracy due to the inevitable small error-rate in the entities and related relations mapping.

### **Principal Duties and Responsibilities**

Specific duties include:

- Work under the supervision of the project PI at DCU and carry out tasks as directed.
- Collaborate with industry partners to assist the research team in developing software and systems.
- Conduct research on state-of-the-art techniques for information extraction, retrieval, and processing, in alignment with project goals.
- Assist in designing and executing prototypes for the project's demonstrations.
- Collaborate closely with project partners and the team at DCU to support the overall research program.
- Perform administrative duties related to the research program as needed.
- Attend project meetings and represent the DCU team as required.

- Perform other duties as necessary for the successful implementation of the project's research program.

### **Qualifications, Skills and Experience Required**

The successful candidate must have a degree in an appropriate area or equivalent (NFQ Level 7) plus two years' experience successfully completed at an appropriate level. In addition to the above, it is essential that the candidate possess a subset of the following:

- Proven experience on Cloud Framework to support toolkit deployment and testing.
- Have some experience of deep learning for Ed-tech applications.
- Can work efficiently in a distributed team involving a range of complementary roles and own professional multiple data ingestion and analytical skills.
- Excellent communication skills, written and oral proficiency in English.
- Experience with data analysis and data management.
- Experience of Peer Learning platform design and development.
- Experience of working in the industry.
- Experience of front-end and back-end development.
- Experience of developing novel personal data analytics techniques and evaluating the effectiveness of it.

### **Essential Training**

The postholder will be required to undertake the following essential compliance training: Orientation, Health & Safety and Data Protection (GDPR). Other training may need to be undertaken when required.