DCU Ollscoil Chathair Bhaile Átha Cliath Dublin City University



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

Research Centre Post title

Level Post duration ADAPT Centre Programmer in Proactive and Conversational Information Retrieval Analyst Programmer II Fixed Term Contract up to 16 Months

Dublin City University

Dublin City University (DCU) is a leading innovative European University, proud to be one of the world's leading Young Universities. 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

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 an Analyst Programmer II in Proactive and Conversational Information Retrieval. The appointee will carry out fundamental and applied research, developing and evaluating methods and systems in the emerging areas of proactive and conversational search technologies. This will involve application of established search technologies, such as probabilistic information retrieval models, state-of-the-art neural methods and the developing area of large language models (LLMs). Within this role the appointee will be involved in both ADAPT platform research and contributing to system development in the Cultivate project funded by the EC Horizon Europe programme.

Duties and Responsibilities

The duties and responsibilities of the position include, but are not restricted to, the following:

- Investigate methods for proactive and conversational information retrieval and integration of technologies to develop novel systems for interactive multimodal information retrieval.
- Propose and evaluate novel techniques for proactive and conversational retrieval.
- Implement and explore use of automated information retrieval methods in the Cultivate project as specified in the agreed programme of work for the project and DCU ADAPT's participation this project.
- Participate in ADAPT centre activities, such as industry showcases, annual reviews and industry-targeted projects.
- Report on progress at meetings and in writing to ADAPT centre management.
- Assist in identifying and developing future research and funding initiatives.
- Engage in the dissemination of the results of the research in which you are engaged with the support of and under the supervision of the Principal Investigator.
- Supervise and assist undergraduate and postgraduate students working in this area with their research.
- Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University.

- Engage in teaching and teaching support as assigned by the Head of School under the direction of the Principal Investigator.
- Liaise with both internal and external stakeholders including industry and academic partners/collaborators.
- Carry out administrative work associated with the programme of research as necessary.

Qualifications and Experience

Essential

- Candidates must have a Primary Degree or equivalent (NFQ Level 7) in Information Retrieval or a closely related discipline plus 4 years' relevant experience.
- Experience of conducting research, publishing at leading international venues and collaborating with other researchers.
- Excellent programming and research skills.

Desirable

- Experience of mentoring and/or supervising students would be an advantage.
- Experience in coordinating the development of research prototype systems.
- Experience working in industry or with industrial clients.
- Project management skills.

Essential Training

The postholder will be required to undertake the following essential compliance training:

- Orientation
- Health & Safety
- Data Protection (GDPR)
- Cyber Security Awareness
- Al Literacy

Other training may need to be undertaken when required.

Salary Scale:

Analyst Programmer II salary scale - €56,313 (Point 1) - €59,735 (Point 3)

Appointment will be commensurate with qualifications and experience and in line with current Government pay policy.

Closing date: Friday, 18th July 2025

For more information on the ADAPT Centre, please visit: <u>https://www.adaptcentre.ie/</u>

Informal Enquiries in relation to this role should be directed to:

Professor Gareth Jones, School of Computing, Faculty of Engineering and Computing, Dublin City University. Phone + 353 (0)1 7005559 Email: <u>Gareth.Jones@dcu.ie</u> Please do not send applications to this email address, instead apply as described below.

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 bottom of the Vacancy).

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

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 Silver 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>

