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| <b>Research Centre</b>    | ADAPT SFI Centre for Digital Media Technology                                     |
| <b>Post Title</b>         | Postdoctoral Researcher Natural Language Processing (Neural Net Interpretability) |
| <b>Level on Framework</b> | Level I   |
| <b>Post-duration</b>      | Fixed Term Contract up to 18 months   |

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. The role may include teaching duties to assist with module delivery.

### Background

Dublin City University ([www.dcu.ie](http://www.dcu.ie)) is a research intensive, globally engaged, dynamic institution which has developed its own research specialists, established internationally recognized centres of excellence that have substantive collaborative links with leading universities and industrial partners. DCU is distinguished both by the quality and impact of its graduates and by its focus on the translation of knowledge into societal and economic benefit. Through its mission to transform lives and societies through education, research and innovation DCU acts as an agent of social, cultural and economic progress. DCU is Ireland's fastest growing university and now hosts more than 17,000 students across its three academic campuses: DCU Glasnevin Campus, DCU St Patrick's Campus and CU All hallows campus. 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 to advance your academic career.

The ADAPT Centre, funded by Science Foundation Ireland focuses on developing next generation digital technologies that transform how people communicate by to helping **analyse**, **personalise** and **deliver** digital data more effectively for businesses and individuals. ADAPT researchers are based in four

leading universities: Trinity College Dublin, Dublin City University, University College Dublin and Dublin Institute of Technology. ADAPT's transformative tools allow you explore video, text, speech and image data in a natural way across languages and devices, helping companies unlock opportunities that exist within digital content to re-imagine how to connect people, process and data to realise new economic value.

### **The Project and Role**

This project presents the successful candidate with the opportunity to work in an exciting, fast moving and excellent technical environment, playing a guiding role in a research project. The motivation of the team is to grow this research-led initiative into effective commercialisation of the research work products.

The role will also include an opportunity to carry out research in neural network interpretability, specifically focusing on evaluating the syntactic information encoded in popular deep learning architectures. In addition, the Postdoctoral Researcher will co-supervise, with the Principal Investigator, a PhD student working on the same topic.

### **Principle Duties and Responsibilities**

Please refer to the job description for a full list of duties and responsibilities associated with this role.

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

Candidate will hold a minimum of a PhD degree in Computational Linguistics or related discipline with excellent programming skills.

In addition, it is desirable that a candidate has skills in:

- Grammaticality/acceptability judgements, sentiment analysis, natural language generation
- Established student supervision
- Designing and running experiments on high-performance computing clusters
- A strong publication record of international peer-reviewed publication and presentation in top-tier conferences and journals.
- Excellent research skills with experience neural approaches to Natural Language Processing including sentiment analysis, natural language generation and grammaticality judgements
- Excellent written and verbal communication and interpersonal skills.

## **Mandatory Training**

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

## **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 convey 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.

**Salary Scale:** Post-Doctoral Researcher IUA Scale\* €37,874 – €49,048 per annum

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

**Closing date:** 22<sup>nd</sup> August 2020

Informal enquiries: Informal enquiries can be made to Dr Jennifer Foster, Lecturer, ADAPT, DCU. Email: [Jennifer.Foster@dcu.ie](mailto:Jennifer.Foster@dcu.ie), Ph: 01 7005263, or/ 086 8135701

## **Application Procedure:**

Application forms are available from the DCU Current Vacancies (open Competitions) website at <http://www.dcu.ie/vacancies/current.shtml>.

Applications should be submitted by e-mail with your completed application form to [hr.applications@dcu.ie](mailto:hr.applications@dcu.ie)

Please clearly state the role that you are applying for in your application and email subject line: **Job Ref #RF1397 Postdoctoral Researcher – Natural Language Processing (Neural Net Interpretability)**.

Dublin City University is an equal opportunities employer and is committed to promoting gender equality reflected in its attainment of the Athena SWAN Bronze Award. Information on a range of university policies aimed at creating a supportive and flexible work environment are available at [www4.dcu.ie/policies/policy-starter-packs.shtml](http://www4.dcu.ie/policies/policy-starter-packs.shtml).