Adapt Centre

Dublin City University (DCU), Ireland

Research Masters Studentship in Irish Language Technology
Free fees
Stipend of EUR16k per annum

Post Specification

Post Title:	Research Masters Studentship – Irish NLP
Post Status/Ref:	Fixed Term, 2 years Masters Studentship in Irish Natural Language Processing
Research Group/Department/School:	ADAPT Centre, School of Computing
Location:	Dublin City University
Funding:	Annual payment of tax-free stipend of €16k. In addition, payment of academic fees.
Deadline:	Open until filled

General enquires concerning this post can be addressed to **teresa.lynn@adaptcentre.ie**

Research Topic

This Research Masters position is ideal for a graduate of computing who is interested in becoming skilled in the area of artificial intelligence with respect to language technology. This position is part of the GaelTech project at the School of Computing in DCU, and is funded by the Department of Culture, Heritage and the Gaeltacht under the National Digital Strategy 2019. It focuses on applying these skills to the development of tools and resources for the Irish language – namely investigating the use of Irish online.

User-Generated Content (UGC) describes content that has been created online without having gone through a review process for quality, grammatical correctness, clear structure, etc. UGC text is usually found on online forums, social media platforms, and blogging platforms. As the amount of online data increases, the demand for tools to process and interpret this data also increases. Natural Language Processing (NLP) tools are used to facilitate the processing of large textual data. However, when it comes to UGC, standard tools and the approaches to developing them need to be tailored to cater for such `noisy' text.

The Irish language has seen a resurgence of use over the past several years, and this is particularly evident online. However, as this digital content grows, it is difficult at a glance (and without the assistance of technology) to see exactly how Irish language use is evolving in both linguistic and sociolinguistic terms.

This research will focus on the application of current state-of-the-art techniques to assess how we can include existing linguistic resources into data-driven (statistical based) models for processing UGC in a resource-scarce language scenario. This position provides the opportunity to work in a team of inter-disciplinary Irish NLP researchers as part of a combined effort to address the lack of linguistic tools and resources currently available to Irish language processing.

The GaelTech team is an affiliation of the ADAPT Research Centre in Dublin City University. ADAPT has received €50 Million research funding from Industry and Science Foundation Ireland to support 150 researchers across 4 universities in Dublin. The ADAPT Centre's mission is to produce world class research that delivers disruptive innovations for the digital media and intelligent content industry. This Research Masters position will be supervised by Dr. Teresa Lynn and Dr. Jennifer Foster.

Duties and Responsibilities

The successful candidate will work within a small group of Academics, Postdoctoral Researchers, PhD students and Research Assistants. The successful candidate will research the specialist area of Natural Language Processing, specifically for Irish language User-Generated Content. The tasks to be performed as part of this position will include:

- Evaluate current tools and techniques on Irish UGC
- Explore new approaches to processing Irish UGC
- Contribute to journal and conference publications
- Travel to workshops or conferences (possibly overseas)
- Present work and findings to peers or the general public in various forums
- Undergo training to advance knowledge in machine learning, Irish linguistics and language technology
- Contribute to activites related to the promotion of Irish LT, and selected projects within the Irish Language Technology group.

Person Specification

Qualifications

The successful candidate will have a Primary degree in Computer Science or a closely related discipline, or Computational Linguistics (or similar) with a minimum of II.I grade.

Knowledge & Experience (Desirable)

- Experience in language technology or natural language processing is a distinct advantage

Skills & Competencies

The successful candidate:

- Must have an advanced level of Irish (Leaving Cert B higher level or higher)
- Must display a keen interest in natural language processing.
- A knowledge of linguistics or language studies is a distinct advantage (but not necessary).
- Strong programming skills (esp. scripting) and technical experience is required.

- Will be highly motivated, with strong written and oral communication skills, and possess critical thinking skills.
- Must be eager to work in and learn from multi-disciplinary and multi-organisation teams.

The ADAPT Centre

ADAPT is Ireland's global centre of excellence for digital content and media innovation. Led by Trinity College Dublin (TCD), it combines the expertise of researchers at four universities (Trinity College Dublin, Dublin City University, University College Dublin, and Dublin Institute of Technology) with that of its industry partners to produce ground-breaking digital content innovation.

ADAPT brings together more than 120 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. With EURO 50M in new research funding from Science Foundation Ireland and industry, ADAPT is seeking talented individuals to join its growing research team. Our research and technologies will continue to help businesses in all sectors and drive back the frontiers of future Web engagement.

Dublin City University (DCU)

Dublin City University (DCU) is young and vibrant university with a strong culture of scholarship and enterprise, developed through its strong, active links with academic, research and industry partners in Ireland and around the world. DCU provides a unique learning environment where students are encouraged to develop their creativity and skills as innovators. Researchers at DCU are translating their ideas and discoveries into new solutions in business, technology and society through their engaged with spin out companies and established industrial clients.

Application Procedure

Please apply via email to teresa.lynn@adaptcentre.ie and include a;

 - Targeted cover letter (600 words minimum) expressing your suitability for a position

 - Complete CV

Please include the reference code: MSC_UGC on all correspondence.

There will be an interview process, and the successful candidate will be invited to apply via the DCU graduate studies admission system.

Dublin City University is an equal opportunities employer