

ADAPT Undergraduate Internship Programme 2018

PROJECT DESCRIPTION

<i>Institution/Team:</i>	DCU/ Irish NLP Group
<i>Project Title:</i>	Tools and Resources for Irish Language Technology
<i>Suitable for students who are studying in the following areas:</i>	Computer Science, Irish language, linguistics, computational linguistics, machine translation, language technology
<i>Skills needed:</i>	<p>Strong programming skills, scripting skills are particularly desirable e.g. Python, Perl, Java</p> <p>Must be familiar with Linux based operating systems</p> <p>Excellent problem solving and communication skills</p> <p>Awareness or understanding of machine learning or machine translation is desirable (not necessary)</p> <p>An ability to work with the Irish language (intermediate to advanced level; strong reading comprehension and grammar understanding; spoken level not too relevant for this position)</p>
<i>Project Description:</i>	<p>The Irish NLP team at the ADAPT Centre is involved in a number of projects that are targeted at the development of tools and data resources for the Irish language. These resources will contribute to the development of technology that can process and understand Irish language, enabling future development of Irish language applications.</p> <p>Irish as a minority language lacks many of the language tools and resources that many other major languages enjoy. The lack of skilled researchers in this area plays a major role in this challenge. This internship opportunity provides the opportunity for a student interested in this field to find out how they can contribute to this language technology drive.</p> <p>The current scope of work in the NLP group (under the GaelTech project) involves machine translation, analysis of social media text, code-switching, parsing, and multi-word processing.</p>
<i>The Role of the student & benefits gained from participation in this project:¹</i>	<p>The work will involve the student assisting on these projects through various activities involving analysis and processing of Irish text (e.g. analysing input and output of systems such as parsers or machine translation tools, setting up and running experiments and testing out research theories to identify possible future projects in the field).</p> <p>The successful candidate will have an opportunity for exposure to a wide range of NLP activities which is an ideal context in which to see where their strengths and skills are most useful and effective in the field of Irish language technology.</p> <p>This work will expose the student to a research and development environment and may lead to her/him continuing with a research Masters or PhD in the area in the future.</p>
<i>Who will be working with you?</i>	Our undergraduate student will be working closely with Meghan Dowling and Abigail Walsh, PhD students in our group. S/he will also have the support of Dr. Teresa Lynn, who oversees the group's NLP activities, along with interaction with many of the postgraduate students in the ADAPT Centre. The student will participate in all our project meetings during his/her time with us.
<i>Short description of the group:</i>	The Irish NLP team is a research group within the ADAPT Centre responding to the need for world class language technologies for our National language.

¹ ***This is an initial description of the role of the student and it is liable to change following discussions between the investigators and the student.***

Recommended Reading Material:	<ul style="list-style-type: none"> • Active Learning and the Irish Treebank • Universal Dependencies for Irish • English to Irish Machine Translation with Automatic Post-Editing • Minority Language Twitter: Part-of-Speech Tagging and Analysis of Irish Tweets <p>(all available from: http://www.computing.dcu.ie/~tlynn/publications.html)</p>	
Other information:		
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