


# CNGL Undergraduate Students as Researchers Programme 2011 PROJECT DESCRIPTION

<b>Institution/Track:</b>	Located in Dublin City University - ILT 1.9
<b>Project Title:</b>	Medical dialogue corpus evaluation
<b>Suitable for students who are studying in the following areas:</b>	HCI, User interface design, 3D animation, computational Linguistics, Irish Sign language (ISL), Deaf studies
<b>Skills needed:</b>	Strong analytical skills, strong sign language skills, good communication skills,
<b>Project Description:</b>	<p>Over the past year our team has developed a corpus of almost 400 utterances. The corpus consists of utterances from an appointment scheduling dialogue between a doctor's receptionist and a Deaf person.</p> <p>The corpus has a number of modalities including: English text, English Audio, ISL video, HamNoSys Transcription and ISL 3D Avatar animations.</p> <div style="text-align: center;">  </div> <p>We would like to perform a manual evaluation on the quality of the Irish Sign Language in the 3D Avatar animations to identify the features that require most immediate improvement This will involve 3 phases:</p> <ol style="list-style-type: none"> <li>1. Devising the evaluation strategy.</li> <li>2. Observing Deaf users of the corpus and interviewing them afterwards. There may also be some survey work. Ideally we would like to evaluate 25-50 users from various backgrounds.</li> <li>3. Analysing and compiling the results.</li> </ol>
<b>The Role of the student &amp; benefits gained from participation in this project:<sup>1</sup></b>	<p>The students will assist in all three stages of the evaluation process</p> <p>The student will gain knowledge and hands-on experience of a scientific evaluation process. The student will gain experience working on a research project that's main focus is improving communication through ISL, The student will also be eligible to join the ISL special interest group for the duration of the internship. Through the special interest group the student will have direct access to research knowledge in for Sign Languages.</p>

<sup>1</sup> ***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.***

<b>Who will be working with you?</b>	Our undergraduate student will be working closely with Robert Smith, a postgrad in the group. S/he will also have the support of Sara Morrissey a postdoc in the group.	
<b>Short description of the group:</b>	Minority language and assistive technology machine translation group focussing on improving sign language translation and animation. The group consists of a postdoctoral researcher and two PhD students	
<b>Recommended Reading Material:</b>	<p>Morrissey, S., Somers, H., Smith, R., Gilchrist, S. and Dandapat, S. (2010). Building a Sign Language corpus for use in Machine Translation. To appear in <i>Proceedings of the 4th Workshop on Representation and Processing of Sign Languages: Corpora for Sign Language Technologies</i>. Valetta, Malta. pp. 172-177.</p> <p>Matt Huenerfauth, Liming Zhou, Erdan Gu and Jan Allbeck. 2008. "Evaluation of American Sign Language Generation by Native ASL Signers." <i>ACM Transactions on Accessible Computing</i> (journal). Volume 1, Number 1, Article 3.</p>	
<b>Other information:</b>	This is a fantastic opportunity for the CNGL to reach out to a minority group. The Irish Deaf Community often feel isolated in regards to research that is taking place on their behalf. This evaluation is a fantastic way to allow them to be involved. We hope to attract a Deaf student to this post as well as conducting our research with Deaf users from various backgrounds.	
<b>For further details on this project please contact:</b>	<b>Name:</b> <b>Phone:</b> <b>E-Mail:</b> <b>Website:</b>	<b>Robert Smith</b>  <a href="mailto:rsmith@comuting.dcu.ie">rsmith@comuting.dcu.ie</a> <a href="http://www.computing.dcu.ie/~rsmith/">http://www.computing.dcu.ie/~rsmith/</a>