



<b>Research Centre</b>	<b>CNGL</b>
<b>Post title</b>	<b>Research Engineer</b>
<b>Post duration</b>	<b>Up to 15M Contract</b>

### **Background & Role**

At the Centre for Next Generation Localisation (CNGL) in Dublin, Ireland, we have a number of exciting career opportunities available and are seeking to recruit a Research Engineer with strong computer engineering and design skills, to work on a number of cutting-edge research projects.

Ideally, applicants will hold an MSc in Computer Science/Software Engineering (or equivalent industry experience i.e. 3+ years) with experience in Natural Language Processing, Machine Translation, Artificial Intelligence, Localisation etc. highly advantageous.

This position provides an excellent opportunity for a strong and creative software engineer to further develop their career and to join a highly-regarded, dynamic, well-funded and continually growing research centre in the area of Language Technology research. The successful candidate will work closely within a team of researchers and with other partners to deliver prototype and research-based systems and applications.

CNGL is a €40M Academia-Industry partnership that involves researchers at Dublin City University (DCU), Trinity College Dublin (TCD), University College Dublin (UCD), University of Limerick (UL), as well as ten industrial partners, including Microsoft, Symantec, IBM, SDL and Welocalize. CNGL comprises over 150 researchers across the various institutions developing novel technologies addressing key challenges in the global digital content and services supply chain. In addition to central funding from Science Foundation Ireland (SFI) CNGL is involved in a number of European FP7 projects and commercial projects in the area of language technology. CNGL provides a world class collaborative research infrastructure, including excellent computing facilities, administrative, management and fully integrated and dedicated on-site commercialisation support.

The successful candidate will become part of the existing research team based at DCU, joining one of the world's largest academic MT research groups comprising over 20 researchers. The team's location at DCU, just minutes from Dublin city centre, offers a conducive environment to research, collaboration and innovation with a wealth of amenities on campus, including restaurants, the state-of-the-art University Sports Complex and swimming pool and the Helix, one of Ireland's most impressive arts venues with three separate auditoria.

## **Principle Duties and Responsibilities**

- Work closely with CNGL's researchers and team leaders in developing new and maintaining current research systems and applications in the area of language technology, including prototype and demonstrator systems.
- Influence all aspects of the research and development process.
- Specification, design and implementation of the supporting system architecture.
- Optimization of code for speed and memory, debugging, and general code maintenance including the implementation of version control systems (e.g. SVN).
- Identification of appropriate algorithms, methods and tools for the development of research systems and prototypes.
- Implementation and use of well established design patterns when developing software and supporting scripts.
- Specification, design and implementation of web-services and related APIs to connect various components within research systems in addition to developing upon existing APIs.
- Implementation and development of unit testing of individual software components to ensure functionality and robustness of software applications.

## **Experience and Skills Desired**

A primary degree in Computer Science or Software Engineering is required with strong programming skills. A graduate degree (MSc.), or equivalent experience (3+ years), in Computer Science, particularly in an area related to Language Technology, Computational Linguistics, Machine Learning, Statistical Modelling or Machine Translation would also present a distinct advantage. Experience with research-based software development in one or more of these areas is highly preferred.

Specific skills or experiences of relevance include:

- Excellent knowledge of one or more of: Java, C++, PHP
- Strong/Excellent knowledge of scripting languages: Python, Bash, Perl etc.
- Comfortable working with UNIX and Windows operating systems
- Excellent algorithmic and analytical skills
- Strong knowledge of cloud/grid computing and experience working with Amazon EC2, Windows Azure or Google App Engine would be a distinct advantage
- Experience in the design of scalable web services
- Familiarity with existing data resources and tools: Moses toolkit, Apertium, BLEU/MERT, POS taggers, Parsers, Wordnet, NLTK, SVMLight, Weka and similar tools desirable
- Ability to develop (rapid) prototypes based on proprietary or open source tools
- The ideal candidate should be able to refer to products and/or research prototypes that they have developed or to which they have contributed

Ultimately, we are seeking candidates with strong programming/software engineering skills and experience working within a research environment. Candidates should have excellent communication and team-working skills, can work on their own initiative and are creative in their approach.

**Salary:**

€37,750 - €46,255

*Subject to experience and qualifications*

**Closing date: 30<sup>th</sup> November 2011**

**Application Procedure**

**For informal enquiries please contact:**

**Centre Director**

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**Application forms are available at:**

[www.dcu.ie/vacancies/APPLICATION\\_FORM\\_8pg.doc](http://www.dcu.ie/vacancies/APPLICATION_FORM_8pg.doc)

and from the Human Resources Department, Dublin City University, Dublin 9.

Tel: +353 (0)1 700 5149; Fax: +353 (0)1 700 5500; Email: [hr.applications@dcu.ie](mailto:hr.applications@dcu.ie)

Email the completed application form, together with your CV, to: [hr.applications@dcu.ie](mailto:hr.applications@dcu.ie)

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