



**Java Software Developer (Machine Translation) [2 positions]
(Temporary contracts to March 2013)**

The Centre for Next Generation Localisation (CNGL) is a DCU-led Science Foundation Ireland (SFI) funded Centre for Science Engineering and Technology directed by Prof. Josef van Genabith. CNGL is a €30M collaborative research centre that involves Dublin City University, Trinity College Dublin, University College Dublin, University of Limerick, and nine industrial partners who include world leaders in their respective fields.

Our work is guided by the vision of enabling people to interact with content, products and services in their own language, according to their own culture, and according to their own personal needs.

CNGL is now in the process of expanding its research base through new projects funded from a variety of sources (e.g. EU FP7, Enterprise Ireland, etc.).

Given the award of the EU-funded FP7 project PLUTO (Patent Language Translation Online), we wish to recruit two Java Software Developers on a fixed term contract basis to work in the area of **Machine Translation** focused on cross-language search and translation of patent and other Intellectual Property material.

Duties and Responsibilities

The post-holders will be responsible for the following:

- Specification, design and implementation of system components from DCU's MATREX machine translation framework for use in the multi-partner PLUTO project targeted at deploying novel search and translation technologies in a specific document domain (patents).
- Configuration and deployment of the MATREX machine translation framework in a grid computing/cloud computing environment.
- Specification, design and implementation of a range of file handling and parsing modules as pre- and post- processing steps in the Machine Translation framework.

- Specification, design and implementation of user-facing tools for the control and administration of the machine translation process including for training (customising) the Statistical Machine Translation system.
- The software developers will work at the interface of both Translation Memory (TM) and Machine Translation (MT) systems and with both statistical and hybrid rules-based MT systems.

The PLUTO Software Developers will take DCU's research prototype MATREX Machine Translation framework and the requirements of the PLUTO project to design, implement, evaluate and deploy an Enterprise-quality, Commercial-grade software system for cross-language search and translation on a cloud-computing infrastructure. The post-holders will also work on the integration, deployment and evaluation of diverse system components of the overall unified PLUTO solution in collaboration with other PLUTO project technology partners.

The Java Software Developers will work closely within a team of researchers and with other partners at various academic and commercial locations around Europe to deliver on the specified programme of research and development, leading to commercial deployment of a system for cross-language patent search and translation. The post-holders will also have the benefit of interaction with the wider CNGL research and development teams, including the significant body of researchers working on Language Technology and Machine Translation at CNGL.

Experience and Skills Desired

The post-holders must possess excellent Java Software Development skills and demonstrated commercial experience in Java software development. Experience with software development in the area of machine learning, statistical modelling, language technology or machine translation would be a significant advantage.

Specific skills or experiences of relevance include:

- A strong knowledge of grid computing. Experience working with Amazon EC2, Windows Azure or Google App Engine.
- Experience in the design of scalable web services, including parallelisation of compute-intensive applications (Hadoop)
- Experience in ASP.NET, JSP, Python, PHP, JQuery, CSS, web frameworks, etc.
- Knowledge of file parsing and handling, string manipulation, etc.

A primary degree in Computer Science or Software Engineering is required. A graduate degree in Computer Science, particularly in an area related to Language Technology, Computational Linguistics, or Machine Translation is desirable.

We are also seeking somebody who can carry out focused development projects to set timelines and who has excellent communication and team-working skills.

Some knowledge of additional European languages would provide an advantage.

Closing date: 31 July 2010

Salary scales: commensurate with experience

Dublin City University is an equal opportunities employer
