The University of Dublin
Trinity College

Post Specification

Post Title:	Web Systems Engineer
Post Status:	2-year contract
Department/Faculty:	Centre for Next Generation Localisation (CNGL), School of Computer Science and Statistics
Salary:	Research Assistant Level 1 - €23,015 - €37,257
Closing Date:	12 Noon on Tuesday, 22nd June, 2010

Post Summary

We wish to recruit a Web Systems Engineer on a fixed term contract basis with primary responsibility for designing and implementing the functional components (middleware) for an adaptive, collaborative, multilingual social networking environment in collaboration with the relevant research leaders.

This position is based at Trinity College Dublin and the appointee will be an employee of Trinity College Dublin. S/he will report to the CNGL Project Manager (based at TCD) and to the CNGL Deputy Director, Prof. Vincent Wade.

Background to the Post

The Centre for Next Generation Localisation (CNGL) is a Science Foundation Ireland (SFI) funded Centre for Science Engineering and Technology. It is a €30M collaborative research centre that involves collaboration between Dublin City University (coordinating partner), Trinity College Dublin, University College Dublin, University of Limerick, and nine industrial partners who include world leaders in their respective fields.

Localisation is the adaptation of digital content to culture, locale and linguistic environment. CNGL conducts research on language technologies (machine translation, speech recognition/synthesis), digital content management technologies (adaptive hypermedia, IE/IR), their application in localisation workflows, and language technology-focused software engineering.

The Centre for Next Generation Localisation (CNGL) is a dynamic Academia-Industry partnership with over 100 researchers developing novel technologies addressing the key localisation challenges of volume, access and personalisation. Our objective is to produce

substantial advances in the basic and applied research underpinning the design, implementation and evaluation of the blueprints for the Next Generation Localisation Factory.

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.

Standard duties of the Post
The post-holder will be working as part of the CNGL DCM (Digital Content Management) Team and be based in Trinity College Dublin. They will liaise across the CNGL stakeholders in designing, implementing and evaluating a set of functional middleware components for an adaptive, collaborative, multilingual social networking environment.

The duties and responsibilities of the position include:

- Comprehension of the CNGL technologies, methodologies and processes for Next Generation Localisation;
- Comprehension of the state of the art in Service Oriented Architectures and Workflow, Semantic Web, Social Networking and socially-driven interaction online;
- Liaise with CNGL stakeholders and the Systems Framework team to quantify and comprehend their particular functional needs for a socially-driven web based localisation environment;
- Design and Implement a set of scalable web service-enabled functional components as the middleware of the adaptive, collaborative, multilingual social networking environment. This will involve close collaboration with the Web Interface Developer;
- Evaluate these components with the CNGL stakeholders including the academic and industrial partners, secondary level school children, university students and the general public;
- Assist researchers in the DCM team;
- Liaise closely with line managers to ensure alignment of work within the CNGL working policies and procedures, including Intellectual Property management;

Person Specification

Qualifications
Candidates should

- Hold an M.Sc. qualification in a relevant field or have equivalent relevant industry experience
- **NB: A portfolio of work should be included with application (see application details below)**

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Knowledge & Experience / Skills and Competencies

Essential

- Excellent analytical and problem solving skills;
- Proven distributed web engineering experience (distributing computing, parallelisation, load balancing, etc);
- Proven Service Oriented Architecture and Workflow Development capabilities;
- Functional web technologies such as Web Services, XML, JSON and associated manipulation languages;
- Experience with enterprise Java, Python, Ruby-on-Rails or enterprise PHP;
- Experience with Database programming and management;
- Strong background in software patterns;
- A record of successful teamwork;
- Ability to prioritise and manage workloads in a multi-tasking environment;
- Excellent communication skills, both written and oral - Good interpersonal skills and an ability to work within a dynamic team;
- Report writing experience and high level of proficiency in IT packages.

Desired

- An appreciation of commercialisation and entrepreneurship;
- Experience with the Hadoop projects.

Please Note: No expenses will be paid in travelling to interview

Department Summary

Further details concerning the CNGL Centre for Science Engineering and Technology is available at their web-site www.cngl.ie

Trinity College Dublin

Founded in 1592, Trinity College Dublin is the oldest university in Ireland and one of the older universities of Western Europe. On today's campus, state-of-the-art libraries, laboratories and IT facilities, stand alongside historic buildings on a city-centre 47-acre campus. Trinity College Dublin is currently ranked 43rd in the top world universities by the Times Higher Education Supplement Global University Rankings 2009 and 13th in Europe.

Trinity College Dublin offers a unique educational experience across a range of disciplines in the arts, humanities, engineering, science, human, social and health sciences. As Ireland's premier university, the pursuit of excellence through research and scholarship is at the heart of a Trinity education. TCD has an outstanding record of publications in high-impact journals, and a track record in winning research funding which is among the best in the country.

TCD has developed significant international strength in its research in eight major themes which include globalisation; cancer; genetics; neuroscience; immunology and infection; communications and intelligent systems; nano and materials science as well as Irish culture and the creative arts. TCD aims to become the world reference point in at least one of these areas of research in the next 10 years.

Its current flagship interdisciplinary research institutes are in areas such as molecular medicine, neuroscience and international integration studies and nanostructures and nanodevices. The construction of Ireland's first purpose built nanoscience research institute was opened in January 2008, which houses 150 scientists, technicians and graduate students in specialised laboratory facilities. The building also includes an innovative public venue, the Science Gallery. The Biosciences Development is due for completion in mid 2011 and is the most ambitious construction project in Trinity College's history. This Development will define the scientific research landscape in Trinity College and will allow Ireland to take an international lead on the delivery of quality pharmaceutical and biotechnology research infrastructure. The building will be central to the redevelopment of Pearse Street.

The Library of Trinity College is the largest research library in Ireland and is an invaluable resource to scholars. In addition to purchases and donations accrued over four centuries, the College has had 200 years of legal deposit. By this right Trinity can claim a copy of every book published in Ireland the UK. The Library contains 4.25 million volumes, 30,000 current serial titles as well as an extensive collection of manuscripts, the most famous being the Book of Kells.

Trinity continues to attract intellectually strong students from Ireland and abroad. More than half of its incoming undergraduates have earned in excess of 500 out of a maximum 600 points in the national Leaving Certificate examination. The accessibility of a Trinity education to all students of ability is also very important. Trinity College was the first university in Ireland to reserve 15% of first year undergraduate places for students from non-traditional learning groups – students with a disability, socio-economically disadvantaged students as well as mature students. The College has met its target in this respect. There is also an exciting international mix of its student body where 16% of students are from outside Ireland and 40% of these students are from outside the European Union. TCD students also have an opportunity to study abroad in other leading European universities through Trinity's partnership agreements.

Students also benefit from a scholar teacher model where they have the opportunity of being taught by world-leading experts in their field. Interdisciplinarity forms a key element in the College strategy in increasing Trinity's international standing as a research-led university.

Many of Trinity College Dublin's alumni have helped shape the history of Ireland and Western Europe. They include author, Jonathan Swift, philosopher, George Berkeley, political philosopher, Edmund Burke, wit and dramatist, Oscar Wilde, historian, William Lecky, religious scholar, James Ussher, scientists, John Joly, George Johnstone Stoney, William Rowan Hamilton and physicians, William Stokes and Denis Burkitt.

Two of Trinity College's alumni have won Nobel prizes – Ernest Walton for Physics in 1951 and Samuel Beckett for Literature in 1968. The first President of Ireland, Douglas Hyde was a graduate as was the first female President of Ireland, Mary Robinson.

The Selection Process in Trinity

- The Selection Committee (Interview Panel) will include members of the Academic community

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- Applications will be acknowledged by email. If you do not have confirmation of receipt within 1 day of submitting your application online, please get in touch with us immediately and prior to the closing date/time.

- Given the degree of co-ordination and planning to have a Selection Committee available on the specified date, the College regrets that it may not be in a position to offer alternate selection dates. Where candidates are unavailable, reserves may be drawn from a shortlist.

- Outcomes of interviews are notified **no later than 5 working days** following the selection day.

- In some instances the Selection Committee **may** avail of telephone or video conferencing.

- The College's selection methods may consist of any or all of the following:
    - Interviews
    - Presentations
    - Psychometric Testing
    - References

- It is the policy of the College to conduct pre-employment medical screening/full pre-employment medicals.

Equal Opportunities Policy

Trinity College Dublin is an equal opportunities employer and is committed to the employment policies, procedures and practices which do not discriminate on grounds such as gender, marital status, family status, age, disability, race, religious belief, sexual orientation or membership of the travelling community.

Application Procedure

Candidates are asked to submit a covering letter and a full CV to include the names and contact details of 3 referees (email addresses if possible), together with a portfolio of work **through e-recruitment:**

If you have any further queries please see the contact details below:

Ms. Joanne Smith, Recruitment Executive, Staff Office, House No. 4, Trinity College, Dublin 2, Ireland

Tel: +353-1-896- 1749

Email: joanne.smith@tcd.ie

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