



Post Specification

Post Title:	Senior Research Software Architect
Post Status:	2.5 year contract
Department/Faculty:	Centre for Next Generation Localisation, Trinity College Dublin
Location:	Main Campus, Trinity College, Dublin 2
Salary:	€40,003 to €56,442 per annum commensurate with qualifications and experience to date. Appointment will be made in line with Government Pay Policy
Closing Date:	12 Noon on Sunday 31 st March, 2013
Tenable from:	As soon as possible

Post Summary

The Centre for Next Generation Localisation (CNGL – <http://www.cngl.ie>) seeks to appoint a Senior Research Software Architect to conduct research driven development and systems integration in the areas of: multilingual search, multimodal dialogue and interaction and adaptive, data-driven content processing components.

Reporting to a Principal Investigator, the post-holder will work within a large group of Postdoctoral Researchers, PhD students and Software Developers. The successful candidate will work closely with academics and key research staff to deliver a range of advanced multilingual and multimodal web content processing applications that showcase cutting edge language, knowledge and interaction technologies.

Background to the Post

The Centre for Next Generation Localisation seeks to revolutionise the way people interact with content, systems and each other to achieve unprecedented levels of content access, process efficiency and user empowerment. Breakthroughs in the creation, processing, unification and integration of multilingual, multi-modal and multimedia content are needed to meet the needs of an increasingly mobile and multilingual society across global markets. CNGL will enable content to be created, discovered, translated and personalised, so as to efficiently and effectively deliver natural and engaging web-mediated interactions between users, organisations and communities regardless of language, device and preferences of the user.

CNGL is internationally renowned for its strong, strategic mix of leading researchers in language, adaptive content, interaction and knowledge engineering technologies and its tight engagement with innovation-driven companies that work with content at a global level. CNGL has recently received further multi-million euro funding from Science Foundation Ireland. As a result Trinity College Dublin (TCD) is now recruiting three Research Software Developers and one Senior Research Developer.



Standard duties of the Post

The ideal candidate for this post must demonstrate:

- Minimum of three years software development experience in an academic or industrial R&D setting (essential)
- Honours degree in Computer Science, Computer Engineering or similar, technical discipline (essential)
- System develop and integration experience with one or more of the following:
 - Mobile and web application development
 - Speech and/or video processing
 - Data driven workflow and systems integration and test
 - Natural language processing
- Excellent verbal communication and interpersonal skills
- Proven aptitude for Programming, System Analysis and Design using some or all of the following: Java, PHP, Javascript/AJAX/JQuery, Python, MySQL, XML, HTML5, CSS3 and RDF
- Proven ability to prioritise own workload and work to exacting deadlines.
- Flexible and adaptable in responding to stakeholder needs
- Experience in releasing code to live production environments
- Excellent code optimization and software design skills as well as excellent analytical skills
- Strong team player who is able to take responsibility to contribute to the overall success of the team
- Enthusiastic and structured approach to systems development and testing
- Excellent problem solving abilities
- Desire to learn about new products, technologies and keep abreast of new product and technical developments
- Proven ability to conform to development/web standards.

In addition, candidates for the Senior Research Software Architect must demonstrate:

- Minimum of four years relevant experience in an academic or industrial R&D setting
- Proven system and information architecture design skills that accommodate the needs of multiple stakeholders
- The ability to effectively communicate and to motivate adoption of architectural principles
- Project management and coordination skills with large distributed development teams
- An interest in commercialisation of new innovation and technology transfer
- Ability to mentor more junior team members and guide them in bridging skills gaps



Application Procedure

Applications by email to Dominic Jones - Dominic.Jones@scss.tcd.ie with subject heading Senior Research Software Architect CNGL, to include:

- A targeted cover letter (600-1000 words) expressing your suitability for a position
- A full CV
- Contact details of three referees (e-mail addresses if possible) who we may contact for references

Please Note: No expenses will be paid for travelling to interview.

Further information

Centre for Next Generation Localisation

CNGL is a €50M Academia-Industry partnership based in Ireland. It is unique internationally in addressing the integrated research and development of novel content, knowledge and language processing technologies for the global, multi-lingual web content and services supply chain. It is made up of over 100 researchers in labs integrated across Trinity College Dublin (TCD), Dublin City University (DCU), University College Dublin (UCD), University of Limerick (UL), as well as ten industrial partners, including SMEs, NGOs and multinationals such as Microsoft, Symantec, Intel and Welocalize. In addition to central funding from Science Foundation Ireland (SFI), CNGL has a wide portfolio of European FP7 projects and commercial projects. It therefore offers unique opportunities for international and industrial research collaboration at the highest level in areas of language technology, multi-lingual web and adaptive, personalised content. CNGL provides a world class collaborative research and innovation environment. It provides: world-class PhD supervision by integrated teams of leading academics; an experienced and supportive lab community of postdoctoral researchers and research programmers; excellent collaboration and computing facilities; wide ranging skills training opportunities; a dedicated management and administration team and an active commercialisation development pipeline.

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 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 strength in a broad range of research areas including the 18 broadly-based multi-disciplinary thematic research areas listed below.

Sustainable Environment	Next Generation Medical Devices	Identities in Transformation
Smart and Sustainable Cities	Creative Technologies – Digital Media, Arts and Entertainment	International Development
Cancer	Neuroscience	Immunology and Infection
Nanoscience	Telecommunications	Creative Arts Practice
Inclusive Society	Mathematics of Complexity	Intelligent Media and Human Communication
Ageing	International Integration	Digital Humanities

Its current flagship interdisciplinary research institutes are in areas such as biomedical science, arts and humanities, neuroscience, international integration studies, and nanostructures and nanodevices. The construction of Ireland's first purpose built nanoscience research institute, CRANN, 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. In 2011, it received the Shorty Award for Best Cultural Institution on Twitter globally and the Irish Web Award for Best Education and Third Level Website. These joined a list of awards that includes European Museum of the Year Award – Special Commendation 2010 and National IT award for best use of technology in education, 2009.

The recently opened Trinity Biomedical Sciences Institute (TBSI) is an unprecedented development for Biomedical Research in Ireland, both in terms of scale and ambition. It

provides a facility for TCD to continue its upward trajectory in both basic and translational research programmes, notably in the areas of Immunology, Cancer and Medical Devices.

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 has over 4.25 million books, 22,000 printed periodical titles and access to 60,000 e-journals and 250,000 e-books. The Library's research resources



also include internationally significant holdings in manuscripts (the most famous being the Book of Kells), early printed material and maps. Its collections and services support the College's research and teaching community of 15,000+ students and academic staff.

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.

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.

Pension Entitlements

This is a pensionable position and the provisions of the Public Service Superannuation (Miscellaneous Provisions) Act 2004 will apply in relation to retirement age for pension purposes. Details of the relevant Pension Scheme will be provided to the successful applicant.

Applicants should note that they will be required to complete a Pre-Employment Declaration to confirm whether or not they have previously availed of an Irish Public Service Scheme of incentivised early retirement or enhanced redundancy payment. Applicants will also be required to declare any entitlements to a Public Service pension benefit (in payment or preserved) from any other Irish Public Service employment.



Applicants formerly employed by the Irish Public Service that may previously have availed of an Irish Public Service Scheme of Incentivised early retirement or enhanced redundancy payment should ensure that they are not precluded from re-engagement in the Irish Public Service under the terms of such Schemes. Such queries should be directed to an applicant's former Irish Public Service Employer in the first instance.

Application Procedure

Candidates should submit a cover letter (600-1000 words) expressing your suitability for a position together with a full curriculum vitae to include the names and contact details of 3 referees (email addresses if possible) to Dominic Jones - Dominic.Jones@scss.tcd.ie with subject heading Senior Research Software Architect CNGL