Post Specification

<table>
<thead>
<tr>
<th>Post Title:</th>
<th>Teaching Fellow (Software Engineering)</th>
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<tr>
<td>Post Status:</td>
<td>Two year fixed term contract</td>
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<tr>
<td>Department/Faculty:</td>
<td>School of Computer Science and Statistics, Faculty of Science, Technology, Engineering and Mathematics (STEM), Trinity College Dublin, the University of Dublin</td>
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<td>Location:</td>
<td>School of Computer Science and Statistics, Trinity College Dublin.</td>
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<td>Reports to:</td>
<td>Head of School of Computer Science and Statistics</td>
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<tr>
<td>Salary:</td>
<td>Appointment will be made on the Teaching Fellow Salary Scale at a point in line with Government Pay Policy (€35,509 to €46,266 per annum).</td>
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<td>Hours of Work:</td>
<td>Hours of work for academic staff are those as prescribed under Public Service Agreements. For further information please following link below: <a href="http://www.tcd.ie/hr/assets/pdf/academic-hours-public-service-agreement.pdf">http://www.tcd.ie/hr/assets/pdf/academic-hours-public-service-agreement.pdf</a></td>
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<tr>
<td>Closing Date:</td>
<td>12 Noon (Irish Standard Time), 4th June 2021</td>
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The successful applicant will be expected to take up post by 1st July 2021.

Post Summary

The School of Computer Science and Statistics invites applications for a full-time Teaching Fellow in Software Engineering and Development. Applicants must hold a postgraduate degree or have equivalent experience in a field related to software engineering and development. Applicants must also have experience in a teaching or similar instructional role and an excellent academic and/or professional track record relative to their career stage.
This post has been created with the specific purpose of supporting the School’s development of a core undergraduate project strand in software engineering, with funding provided for this purpose under the Human Capital Initiative. The successful candidate will be expected to teach at undergraduate and/or postgraduate level (through lectures, laboratories, tutorials or other learning activities), support the development of new course material, supervise group and individual student projects and dissertations and undertake administrative tasks supporting teaching and learning in the School.

The School is seeking individuals with vision, enthusiasm and a genuine commitment to the vital role of teaching. The ideal candidates will demonstrate a flair for innovation in course design and teaching methods. They will be valued members of the academic community in the School of Computer Science and Statistics.

Candidates wishing to discuss the post informally should contact by e-mail to:
Professor Inmaculada Arnedillo-Sánchez
e-mail: Macu.Arnedillo@tcd.ie

Standard Duties and Responsibilities of the Post
The successful candidate will:

• Teach software engineering and development and other computer science subjects at undergraduate and/or postgraduate level, in large lecture and small group formats and in laboratories, tutorials or other learning activities;
• Support the development of new course material;
• Supervise group and individual student projects and dissertations at undergraduate and postgraduate level;
• Assist other academic staff in the delivery of modules to large student cohorts;
• Develop learning environments that are consistent with modern teaching and learning practices;
• Undertake appropriate administrative duties as directed by the Head of School, for example, coordinating the activities of Demonstrators and Teaching Assistants and managing School initiatives such as the Undergraduate Programming Centre;
• Support School activities such as Open Day exhibitions and;
• Undertake other responsibilities as assigned by the Head of School

Person Specification

Qualifications
The successful candidate will:

• have an excellent academic record; and
• hold a postgraduate degree or have equivalent experience in a field related to software engineering and development.

Knowledge & Experience (Essential & Desirable)

Essential

• A good and broad understanding of Computer Science.
• Experience in programming in full-stack web technologies and/or app development beneficial
• An understanding of using agile principles and techniques for software development and the ability to apply these techniques to a teaching environment.
• Capacity to design, plan and deliver modules at undergraduate and postgraduate level for both large (100+) and smaller classes.
• Ability to work effectively in an interdisciplinary environment.
• Willingness to engage in the administrative requirements of the School and College.
• Ability to work collaboratively in delivering team-taught modules.

Desirable

• A track record teaching software engineering, software development, computer science or a related subject at undergraduate level or experience in a similar role in an industry or professional setting.
• Ability to teach up-to-date principles and standards in HCI and User Interface design or Human Interface Guidelines.
• Experience of module development, administration and assessment.
• Experience of teaching at postgraduate level.
• Successful track record of supervising undergraduate and postgraduate students undertaking technical projects and dissertations.
• Experience applying new teaching and learning practices.
Skills & Competencies

- Excellent communication, organisation and interpersonal skills, with the ability to work both independently and as part of a team.
- Excellent presentation skills with the ability to enthuse listeners.
- A commitment to applying innovative teaching methods.
- Strong organisational skills with the ability to effectively manage a demanding workload.
- A flexible, can-do attitude.
- Ability to work accurately, conscientiously and with initiative.

Application Information

In order to assist with the selection process, candidates should submit a cover letter together with a full curriculum vitae to include the names and contact details of 3 referees (email addresses if possible) and a teaching statement (2 pages summarising teaching philosophy and experience).

- **Please note**: Candidates who do not address the application requirements above will not be considered at the short list stage.
- Candidates should note that the interview process for this appointment is likely to include the delivery of a presentation and may include a test of practical skills.

The School of Computer Science and Statistics

The School has 65 academics and over 100 research staff. The School is internationally recognised for the quality of its research and teaching and is ranked in the top 100 Computer Science Schools worldwide (in QS Subject Rankings 2019) and is the highest ranked in Ireland.

The School offers a wide range of undergraduate and taught postgraduate degree programmes and has approximately 1,200 registered students. In addition, the School has over 120 PhD students.

Research expertise in areas such as digital content, telecommunications, computer vision and ubiquitous computing, combined with cutting edge statistical learning research has provided a rare environment in which members of SCSS exploit the emergence of data and its analysis as a driver in many fields of computer science and statistics.

The School hosts two Science Foundation Ireland (SFI) Research Centres: ADAPT and CONNECT, hosts the ENABLE SFI research spoke on the Internet of Things, and is a partner in a further two SFI Research Centres (Insight and Lero). Four TCD multidisciplinary research themes, namely Creative Technologies, Digital Humanities, Digital Engagement, and Smart Sustainable Cities are led by members of the School. The School currently coordinates seven European Commission projects and is partner in a further eight. The School has signed research contracts in excess of €50 million over the last three years from a range of national and international agencies such as SFI, Enterprise Ireland and the European Commission’s Seventh and Horizon 2020 Framework Programmes.

For further information, please visit http://www.scss.tcd.ie/

The E3 Vision

Trinity College Dublin is embarking on an ambitious project to expand education and research activities across three of its Schools: Computer Science and Statistics, Engineering, and Natural Sciences. Recognising the importance for humanity of addressing the global problem of sustainable technological development, the expansion of the three Schools is being executed as a single strategic activity - the E3 initiative.

The E3 initiative is premised on the realization that:
human inquisitiveness is unquenchable and the need and desire for advanced technologies is a positive characteristic of the human spirit; and

- the natural capital of the planet is finite and should be used to provide flows of goods and services sustainably and equitably.

With the E3 initiative, Trinity promotes the vision of a society where the interdependence between technological innovation and our natural capital is advanced by world-leading research, education and entrepreneurship. The E3 initiative will position Ireland at the forefront of research in Science, Technology, Engineering, and Mathematics (the STEM disciplines), that are crucial for future economic development. It will educate engineers and scientists for employment in existing and new technology sectors, equip them with the skills and attributes to direct the creation of new businesses, and place Ireland in a leading role globally for the quality of graduates in the STEM disciplines.

The School of Computer Science and Statistics, as part of the E3 initiative, is expanding its research and teaching in the key area of Artificial Intelligence.

The E3 initiative will be without precedent in Ireland, and among the first internationally to integrate engineering, technology and scientific expertise, at scale, to address some of the grand challenges facing our country and our world.

**Trinity College Dublin, the University of Dublin**

Trinity is Ireland’s premier university, with a proud tradition of excellence stretching back to its foundation in 1592. The oldest university in Ireland, and one of the oldest in Europe, today Trinity sits at the intersection of the past and the future, and is ideally positioned as a major university in the European Union. Our 47-acre campus is located in the heart of Dublin city centre and is home to historic buildings dating from the University’s establishment, as well as some of the most cutting-edge teaching and research facilities in Ireland. Students at Trinity benefit from a unique educational experience across a range of disciplines in our three faculties – Arts, Humanities, and Social Sciences; Engineering, Mathematics and Science; and Health Sciences. The pursuit of excellence through research and scholarship is at the heart of a Trinity education, and our researchers have an outstanding publication record and strong record of grant success.
Trinity has developed 18 broad-based multidisciplinary research themes that cut across disciplines and facilitate world-leading research and collaboration within the University and with colleagues around the world. These internationally recognised themes include such diverse areas as Cancer, Immunology, Telecoms, Identities in Transformation, Nanoscience, Neuroscience, and Making Ireland. Researchers from across the University work together in innovative ways to develop new and exciting approaches to their research and explore the frontiers of knowledge in the 21st century. In creating these dedicated research themes, Trinity’s researchers are able to become a more powerful force on the global stage, successfully competing for large-scale grants and attracting top students and faculty to the University. Trinity is home to Ireland’s first purpose-built Nanoscience research institute, CRANN, which opened in January 2008. This state-of-the-art facility houses 150 scientists, technicians, and graduate students in specialised laboratories, fostering creative innovations that have seen Trinity’s researchers make significant breakthroughs.

The Trinity Long Room Hub for Arts and Humanities Research Institute is the University’s flagship institute for research in the Arts and Humanities, providing a world-class environment for cross-disciplinary collaborative projects. The Long Room Hub provides a central location through which the University’s internationally respected Arts and Humanities research can become more visible, demonstrating its relevance for contemporary and future societies. Researchers from across the University regularly participate in debates on topical issues facing the world today. As well as operating an International Visiting Research Fellowship programme, the Long Room Hub also hosts major EU-funded Digital Humanities projects.

One of the most instantly recognised parts of Trinity’s campus is the famous Old Library, home to the historic Book of Kells as well as other internationally significant holdings in manuscripts, maps, and early printed material. Trinity’s Library is the largest research library in Ireland and is an invaluable resource to Trinity’s students and research community. Built up over the four centuries of the University’s existence, the Library’s collections have benefitted from its status as a Legal Deposit library for the past 200 years, granting Trinity the right to claim a copy of every book published in Ireland and the UK. At present, the Library’s holdings span approximately 4.25 million books, 22,000 printed periodical titles, and access to 60,000 e-journals and 250,000 e-books.
Trinity attracts top students from Ireland and abroad and prides itself on the consistently high standard of student admitted to the University every year. These students are drawn to Trinity for the excellence of our research-led teaching and for the quality and prestige a degree from this University confers. Trinity has also pioneered accessibility to education in Ireland, becoming the first university in the country to reserve 15% of its undergraduate places for students from non-traditional learning groups. Trinity is the top-ranked European university for student entrepreneurship and Europe’s only representative in the world’s top-50 universities.

Our alumni have gone on to shape the history of Ireland and of Western Europe in a wide range of fields. These include such notable figures as Jonathan Swift, Oscar Wilde, William Rowan Hamilton, Edmund Burke, William Stokes, Denis Burkitt, Louise Richardson, Lenny Abrahamson, and Anne Enright. Three of Trinity’s graduates have been awarded Nobel prizes: Ernest Walton for Physics in 1951; Samuel Beckett for Literature in 1968; and William Campbell for Physiology / Medicine in 2015. Trinity also counts the first female President of Ireland among its alumni in Mary Robinson, as well as other notable former Presidents Douglas Hyde and Mary McAleese. At Trinity we are justifiably proud of our tradition, and we strive to uphold this excellence as we face the demands of the 21st century.

Further Information for Applicants

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<tr>
<th>URL Link to Area</th>
<th><a href="https://www.scss.tcd.ie//">https://www.scss.tcd.ie//</a></th>
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<tr>
<td>URL Link to Human Resources</td>
<td><a href="https://www.tcd.ie/hr/">https://www.tcd.ie/hr/</a></td>
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Ranking Facts

Trinity is the top ranked university in Ireland. Using the QS methodology we are ranked 88th in the world and using the Times Higher Education World University Rankings methodology we are 117th in the world.
Overall

- Trinity is Ireland’s No.1 University in the QS World University Ranking, THE World University Ranking and the Academic Ranking of World Universities (Shanghai).
- Trinity is ranked 88th in the World, and 29th in Europe, in the 2017/2018 QS World University Ranking.
- Trinity is ranked in the Top 100 for Graduate Employability in the QS 2017 Rankings.
- Trinity is in the Top 50 most innovative universities in Europe according to Reuters.¹
- Between 2010 and 2015, Trinity was ranked the top university in Europe for entrepreneurship according to Pitchbook’s independent analysis.²

Internationalisation

- Trinity is ranked 52nd in the world in the THE World University Ranking for international outlook.

¹ [http://www.reuters.com/article/us-innovative-stories-europe-idUSKCN0Z00CT](http://www.reuters.com/article/us-innovative-stories-europe-idUSKCN0Z00CT)
Research Performance

- Of the 981 institutions included in the THE World University Rankings for 2017, Trinity is in the top 15% internationally for research performance.
- Trinity is ranked in the top 15% internationally by QS for citations.

In the QS World University Rankings:

- Trinity is ranked in the top 50 worldwide for 4 subjects according to the QS World University Subject Rankings 2018. The University is ranked in the top 100 globally for 20 subjects overall.
- Trinity’s Top 50 subjects include Classics (28th), English (28th), Politics (43rd) and Nursing (25th).
- Trinity is ranked in the top 100 for each of the following 16 subjects: History, Languages, Philosophy, Theology, Computer Science, Biology, Medicine, Pharmacy, Chemistry, Geography, Materials Science, Education, Law, Social Policy, Sociology and Sport.
- The University is ranked in the top 100 for three broad subject areas: Arts & Humanities (57th), Life Sciences & Medicine (87th), and Engineering & Technology (89th).
Research Themes

- Ageing
- Cancer
- Creative Arts Practice
- Creative Technologies
- Digital Engagement
- Digital Humanities
- Genes & Society
- Identities in Transformation
- Immunology, Inflammation & Infection
- International Development
- International Integration
- Making Ireland
- Manuscript, Book and Print Cultures
- Nanoscience
- Neuroscience
- Telecommunications
- Smart Sustainable Planet
- Next Generation Medical Devices
The Selection Process in Trinity

The Selection Committee (Interview Panel) may include members of the Academic and Administrative community together with External Assessor(s) who are expert in the area. Applications will be acknowledged by email. If you do not receive confirmation of receipt within 1 day of submitting your application online, please contact the named Recruitment Partner on the job specification 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 University 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 in writing to candidates and are issued no later than 5 working days following the selection day.

In some instances the Selection Committee may avail of telephone or video conferencing. The University’s selection methods may consist of any or all of the following: Interviews, Presentations, Psychometric Testing, References and Situational Exercises.

It is the policy of the University to conduct pre-employment medical screening/full pre-employment medicals. Information supplied by candidates in their application (Cover Letter and CV) will be used to shortlist for interview.

Applications from non-EEA citizens are welcomed. However, eligibility is determined by the Department of Jobs, Enterprise and Innovation and further information on the Highly Skills Eligible Occupations List is set out in Schedule 3 of the Regulations https://www.djei.ie/en/What-We-Do/Jobs-Workplace-and-Skills/Employment-Permits/Employment-Permit-Eligibility/Highly-Skilled-Eligible-Occupations-List/ and the Ineligible Categories of Employment are set out in Schedule 4 of the Regulations https://www.djei.ie/en/What-We-Do/Jobs-Workplace-and-Skills/Employment-Permits/Employment-Permit-Eligibility/Ineligible-Categories-of-Employment/. Non-EEA candidates should note that the onus is on them to secure a visa to travel to Ireland prior to interview. Non-EEA candidates should also be aware that even if successful at interview, an appointment to the post is contingent on the securing of an employment permit.
Equal Opportunities Policy

Trinity is an equal opportunities employer and is committed to employment policies, procedures and practices which do not discriminate on grounds such as gender, civil status, family status, age, disability, race, religious belief, sexual orientation or membership of the travelling community. On that basis we encourage and welcome talented people from all backgrounds to join our staff community. Trinity’s Diversity Statement can be viewed in full at https://www.tcd.ie/diversity-inclusion/diversity-statement.

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 full Curriculum Vitae to include the names and contact details of 3 referees (including email addresses), together with a cover letter (1x A4 page) and teaching statement (2x A4 page) that specifically addresses the application procedure set out above.

NAME: Aaron O’Hara
E-MAIL ADDRESS: oharaaa@tcd.ie