Professorship of Computer Science (2016)
Trinity College Dublin, The University of Dublin is seeking to appoint a Professor of Computer Science who has a proven international track record in research, teaching and academic leadership.

Trinity encourages inspirational candidates to apply for this exciting opportunity to strengthen the strategic research area of Artificial Intelligence in the School of Computer Science and Statistics (SCSS), and to contribute to research in the ADAPT SFI Research Centre for Digital Content and Media Technology, (www.adaptcentre.ie) hosted by the School.

Candidates for the position should be internationally recognised scholars in at least one of the following research areas: artificial intelligence, digital media and content analytics, knowledge engineering or data engineering. This includes scientific areas such as: machine learning, natural language processing, semantic modelling, personalisation and data analytics. They will have a recognised ability to bring together these research areas or areas related to digital content technology.

They will have an internationally recognised research profile, with a demonstrated ability to raise research funding aligned with the priority research areas of the School, the Centre, and interdisciplinary research initiatives such as ‘Engineering, Environment and Emergent Technologies (E3)’. Applicants should have a consistent record of successful outcomes in collaborating with industry, for example in domains such as, but not limited to, business, health, digital culture, entertainment, education, finance or health.

Trinity is an equal opportunities employer and we encourage and welcome hardworking people from all backgrounds to join our staff community.
Post Specification

Post Title: Professor of Computer Science (2016)
Post Status: Permanent
School: School of Computer Science and Statistics
Faculty: Faculty of Engineering, Mathematics and Science
Location: O’Reilly Institute
Reports To: Head of School, School of Computer Science and Statistics
Salary: Appointment will be made on the Professor salary scale (€117,915 - €151,477 per annum) at a point in line with Irish Government Pay Policy
Closing Date: 12 Noon (Irish Standard Time), Wednesday 19th February 2020 or until all criteria are met

The successful candidate will be encouraged to take up the post by 1st August 2020 or as soon as possible thereafter.
Role of the Professor

The position of Professor is the highest academic post in the University. They possess high academic distinction with the capacity to provide leadership in the development of the discipline and the successful promotion of teaching and research. They have the proficiency to effectively represent the discipline inside and outside the University and are encouraged to act as Head of Discipline or School at some stage in the future.

The Professor will be expected to:

- Contribute to the inspiring work environment in Trinity that attracts high quality researchers and to encourage their contribution to scholarship
- To strengthen links among researchers across Schools and Centres within Trinity and between Trinity and external, non-university organisations
- To engage in national and international research initiatives, allowing Trinity to make a distinctive contribution to scientific life locally and globally
Duties of the Post

The Professor will be required to:

• Play a central role in the School, the ADAPT SFI Research Centre for Digital Media Technology and more broadly within existing and emerging Trinity research themes
• Engage in research both on an individual and collaborative basis and be successful in securing research funding
• Give leadership in the development of the field of artificial intelligence and intelligent content within the School of Computer Science and Statistics at national and international levels
• Contribute to the development of the School’s undergraduate and postgraduate teaching programmes, deliver modules, particularly at fresh level, and ensure the delivery of research-led teaching
• Supervise undergraduate and postgraduate students
• Play an interdisciplinary role in E3, the Faculty and University
• Contribute to public engagement on behalf of the School
• Take their turn as Head of Discipline or Head of School
• Contribute to the overall life of the University
Qualifications and Experience

The Professor will have:

• A doctoral degree in Computer Science or other related discipline, with a strong focus on research, a sustained record of high-quality published research output, high achievement in teaching and research supervision, a record of service to the discipline and strong engagement with the University and wider community

The successful candidate must clearly demonstrate the ability to:

• Direct outstanding research in their own field, publishing in the highest quality journals and raising significant national and international research funds
• Establish world recognised research expertise in two or more of the following areas: artificial intelligence, knowledge and data engineering, or digital media and content technology, and create linkages between research areas
• Provide the vision and support necessary to contribute to the research direction of the discipline focused on Artificial Intelligence in the ADAPT SFI Research Centre, and School of Computer Science and Statistics
• Engage in interdisciplinary research and work collaboratively with researchers from a range of disciplines
• Raise significant research funding from a variety of sources and collaborate with colleagues in the School / the ADAPT Centre and Trinity Development and Alumni to seek philanthropic and other funding
• Collaborate with industry
• Provide thought leadership to the artificial intelligence research community through membership of international societies, committees, editorial boards, and through reviewing and refereeing activities
• Inspire and mentor academic staff, take on Head of Discipline or Head of School duties, support development of a strategic vision for the School, contribute to the strategic direction of the University, play a key role in the development of inter-institutional research collaborations, nationally and internationally
• Engage effectively with important partners in the education sector, industry and government. Contribute to the public understanding and impact of artificial intelligence research
• Build curricula and demonstrate commitment, innovation and flair in creating and delivering modules at both undergraduate and postgraduate level
• Deliver excellent teaching and supervision at undergraduate and postgraduate level
• Present and communicate ideas and concepts clearly

Qualifications and Experience
The goal of the Artificial Intelligence discipline is to advance state-of-the-art use of intelligence in systems by tackling theoretic and engineering problems through novel applications. The Discipline’s main focus is on computational issues related to understanding, reasoning, (machine) learning & decision making, and interaction by, and between, systems and their human users. These are explored through a variety of novel applications in the health informatics, entertainment, e-learning and telecommunications management domains. Its key research areas include natural language and media processing, data analysis, machine learning, knowledge representation techniques, semantic modelling, knowledge engineering and visualisation, and user interaction.

The Artificial Intelligence discipline is organised into two research groups: Knowledge and Data Engineering (KDEG) and Computational Linguistics Group (CLG). It hosts a number of world recognised research centres namely, the ADAPT SFI Research Centre for Digital Media Technology, Centre for Health Informatics, and the Enterprise Ireland Learnovate Technology Centre. Its academics initiated the Trinity research theme of Digital Engagement and assist in directing the

ADAPT SFI International Research Centre
The discipline is host to and leads the ADAPT SFI Research Centre (http://www.adaptcentre.ie), an International Research Centre funded by Science Foundation Ireland (SFI), and includes research groups, centres and individual academics drawn from across Trinity as well as eight other Universities in Ireland. ADAPT is a world renowned research centre in the area of intelligent systems for Data Analysis and Integration, Machine Learning, Natural Language Processing, Personalisation, Robotics, and Human Computer Interaction. It provides a partnership between dedicated academics and researchers in AI, digital content technology and industry, drives groundbreaking innovations in areas such as: AI and machine learning techniques for text, video, image and speech analysis, multimodal interaction and human computer interaction, data analytics, semantic modelling, data governance, personalisation and information retrieval. It was recently awarded over €50M in research funding from Irish Government and Industry and attracted a further €15M in European Research grants. It has published over 1000 scientific papers in leading journal and international conferences in the last four years, winning 16 best paper awards in that period.

Enterprise Ireland Learnovate Centre
Learnovate is an industry-led research and innovation centre focused on EdTech and learning technologies. Its mission is to enhance the competitive advantage of Ireland’s learning technology industry and to maximise the success any company can derive from using learning technology effectively. The vision is to play a significant role in helping the learning tech industry to transform the lives of learners in the workplace, schools, universities and the home.
Trinity Centre for Health Informatics

The Centre for Health Informatics brings together academic and research staff from the Health Sciences and Engineering, in association with colleagues in St James’s Hospital, Tallaght Hospital and the Technical University Dublin. The three foci of the Centre are education, research and awareness of Health Informatics. Research interests include representation and communication of healthcare data, information and knowledge to patients, clinicians and carers. This informs their decisions at the point of care and contributes to the ongoing improvements of healthcare.

Trinity Centre for Computing and Language Studies

The Centre for Computing and Language Studies is a research centre to which the Computational Linguistics Group (CLG) contributes in strength. The computational linguists in SCSS study natural language syntax, semantics and processing. Major contributions are in the area of finite state models of temporal semantics, human interaction in dialogue, discovery of multi-word expressions, models of metaphor processing and machine learning for text classification. CLG participates in the ADAPT Centre and several major research projects.

Digital Engagement

The Digital Engagement research theme focuses on the impact of today’s digital technologies on the way people communicate and on research innovations to enhance how people interact with information (content) in a way which empowers them. By embedding intelligence into digital content and communications, it enables that content to be more easily discovered, analysed, understood, translated among different languages, delivered through different modalities and adapted to address the needs, situation and preferences of the communicating parties. This incorporates multiple schools and multidisciplinary research centres within TCD, such as the Learnovate Centre, the Centre for Health Informatics and the Centre for Computing and Language Studies. Other areas in TCD with which this theme has strong collaboration include Humanities and Business.

The Discipline also hosts the national SFI Postgraduate Training Programme for Digitally Enhanced Reality (D-REAL) which will support over 120 PhD fully funded scholarships (2019-2026) as well as having participation in two other Postgraduate programmes in AI and Machine Learning.

Useful Websites

School of Computer Science and Statistics
SFI ADAPT Research Centre
Learnovate Centre
Centre for Computing & Language Studies
Centre for Health Informatics
Digital Engagement Theme
Trinity College Dublin
Human Resources

https://www.scss.tcd.ie
http://www.adaptcentre.ie
http://www.learnovatecentre.org
https://www.scss.tcd.ie/CCLS
https://www.scss.tcd.ie/disciplines/intelligent_systems/chi
http://www.tcd.ie/research/themes
http://www.tcd.ie
http://www.tcd.ie/hr
School of Computer Science and Statistics

The School was established in July 2005 following the merger of the Department of Computer Science and the Department of Statistics. Statistics celebrated its 50th anniversary in 2017 and Computer Science in 2019. Today, the School comprises five academic disciplines:

- Artificial Intelligence
- Graphics and Vision
- Networks and Distributed Systems
- Software and Systems
- Statistics and Information Systems.

The School has 65 academics, 40 support staff 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 (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 and is a partner in a further two SFI Research Centres (Insight and Lero). Four Trinity multidisciplinary research themes, namely Creative Technologies, Digital Engagement, Digital Humanities, 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 Horizon 2020 Framework Programme.
The E3 initiative, bringing together Engineering, Environment and Emerging Technology, will be without precedent in Ireland. It will be among the first initiatives internationally to integrate engineering, technology and scientific expertise, at scale, to address some of the grand challenges facing our country and our world.

The E3 – Engineering, Environment and Emerging Technologies 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 realisation that the human unquenchable thirst for knowledge 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 along with the ADAPT SFI Research Centre form a key part of the E3 initiative across the University.
Trinity College Dublin, the University of Dublin

Trinity is Ireland’s leading 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 Digital Engagement, Telecoms, Cancer, Immunology, 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.
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.

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 collection has 6,500,000 printed items, 650,000 maps, 150,000 electronic journals (plus access to 5,000,000 ejournal articles via UK electronic Legal Deposit), 400,000 electronic books (plus access to 500,000 ebook titles via UK electronic Legal Deposit).

Trinity attracts top students from Ireland and abroad and prides itself on the consistently high standard of students 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 accessible education in Ireland. It has become the first university in the country to reserve 15% of its undergraduate places for students from non-traditional learning groups. Our current Strategic Plan aims to reserve 25% of our UG places for these non-traditional learning groups. Trinity is the number one ranked European university for student entrepreneurship and Europe’s only representative in the world’s top-50 universities for student entrepreneurship.
1st IRELAND'S LEADING UNIVERSITY
QS 2020; THE 2020

1st 1ST IN EUROPE FOR PRODUCING ENTREPRENEURS FOR THE 5TH YEAR IN A ROW
PITCHBOOK 2019-2020

1st 1ST IN IRELAND FOR EMPLOYER REPUTATION AND ALUMNI OUTCOMES
QS 2020

TOP 50 IN 6 SUBJECT AREAS
QS 2019

16th 16TH MOST INTERNATIONAL UNIVERSITY IN THE WORLD
THE 2019

108th RANKED 108TH IN THE WORLD
QS 2020
Trinity College Dublin is the top ranked university in Ireland. Using the QS methodology we are ranked 108th in the world and using the Times Higher Education World University Rankings methodology we are 164th in the world.

- Trinity College Dublin is Ireland’s No.1 University
  (QS World University Ranking 2019 Academic Ranking of World Universities (Shanghai), 2019)
- Trinity is ranked 108th in the World
  (QS World University Ranking, 2018/19)

**Internationalisation**

Trinity is ranked 16th Most International University in the World.

Times Higher Education World University Ranking, 2020. Trinity is also the highest ranked university in Ireland.

**Employability**

Trinity is ranked 1st in Ireland for employer reputation and alumni outcomes.

QS World University Rankings for Graduate Employability 2020.

**Innovation and Entrepreneurship**

Ireland’s most innovative university (Reuters Most Innovative European Universities 2018)

Trinity is 1st in Europe for producing entrepreneurs for the 5th year in a row (Pitchbook Universities Report 2019)

**QS Subject Rankings 2019**

- Trinity is ranked 13th in Classics and Ancient History.
- Trinity is ranked 28th in English Language and Literature.
- Trinity is ranked 39th in Mineral and Mining Engineering.
- Trinity is ranked 41st in Nursing.
- Trinity is ranked 42nd in Performing Arts
- Trinity is ranked 50th in Pharmacy and Pharmacology

Trinity ranks in the top 100 in 20 subjects, including those in the 51-100 bracket:

- Computer Science and Information Systems
- Modern Languages
- Theology, Divinity and Religious Studies
- History
- Biological Sciences
- Medicine
- Chemistry
- Geography
- Materials Science
- Education
- Law
- Politics and International Studies
- Social Policy and Administration / Sports-Related Subjects

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

- Trinity College Dublin, the University of Dublin was founded in 1592
- Trinity has three faculties - Arts, Humanities and Social Sciences, Engineering, Mathematics and Science and Health Sciences
- The city centre campus occupies some 51 acres (including the Trinity Technology and Enterprise Campus)
- There is in excess of 220,000 m2 of buildings, including beautiful historic architecture and state-of-the-art modern facilities
- Students can avail of over 170 societies and sports clubs
The Selection Committee (Interview Panel) may include members of the Academic and Administrative community together with External Assessor(s).

The University’s selection methods may consist of any or all of the following: Interviews, Presentations, Psychometric Testing, References and Situational Exercises.

Information supplied by candidates in their application (Cover Letter and CV) will be used to shortlist for interview.

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.

Communications

Applications will be acknowledged by email. If you do not receive confirmation of receipt within 2 hours of submitting your application online, please contact hr@tcd.ie immediately and prior to the closing date/time.

All communication with applicants will be by email.

Eligibility

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 and the Ineligible Categories of Employment are set out in the Regulations. https://dbei.gov.ie/en/What-We-Do/Workplace-and-Skills/Employment-Permits/Employment-Permit-Eligibility/.

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.

Pre-Employment Medical

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

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 details of the relevant Pension Scheme will be provided to the successful applicant on receipt of the completed Pre-Employment Declaration form. 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 Information

Applications will only be accepted through e-recruitment (https://jobs.tcd.ie)

Applicants must provide the following information in applying for this position:

• Cover Letter
• Comprehensive curriculum vitae including full data on publications
• Name and contact details (i.e. address, email etc.) of three referees
• Statement on their vision for the future development of Intelligent Systems in Trinity - maximum 2 pages
• Research plan (summarising research accomplishments to date, and the research they are planning to conduct in the next five years, along with plans for securing competitive research funding) - maximum 2 pages
• Teaching statement (summarising teaching experience and approach) - maximum 2 pages

If you have a query regarding e-recruitment, please contact:
Senior.Appointments@tcd.ie

Contact Information
Interested applicants may contact, with informal enquiries:

• Professor Jeremy Jones, Head of School of Computer Science and Statistics: headscss@scss.tcd.ie
• Professor Vincent Wade, Professor of Computer Science and Director of the ADAPT SFI Research Centre: vincent.wade@scss.tcd.ie