Professor of Computer Science (2016) / ADAPT Director
## Post Specification

<table>
<thead>
<tr>
<th><strong>Post Title:</strong></th>
<th>Professor of Computer Science (2016) / Director of ADAPT SFI Research Centre</th>
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<tbody>
<tr>
<td><strong>Post status:</strong></td>
<td>Permanent Contract, Fulltime</td>
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<tr>
<td><strong>Department/Faculty:</strong></td>
<td>Faculty of Science, Technology, Engineering and Mathematics, Trinity College Dublin, the University of Dublin</td>
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<td><strong>Location:</strong></td>
<td>Discipline of Artificial Intelligence, School of Computer Science &amp; Statistics, Faculty of Science, Technology, Engineering and Mathematics, Trinity College Dublin, the University of Dublin</td>
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<td><strong>Reports to:</strong></td>
<td>Head of School of Computer Science &amp; Statistics</td>
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<td><strong>Salary:</strong></td>
<td>Appointment will be made on the Professorial salary scale at a point in line with Government Pay Policy €132,301 to €167,243</td>
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<td><strong>Hours of Work:</strong></td>
<td>Hours of work for academic staff are those as prescribed under Public Service Agreements. For further information please follow the link below: <a href="https://www.tcd.ie/hr/assets/pdf/academic-hours-public-service-agreement.pdf">https://www.tcd.ie/hr/assets/pdf/academic-hours-public-service-agreement.pdf</a></td>
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<tr>
<td><strong>Closing Date:</strong></td>
<td>12 Noon (GMT), Monday, 8th May 2023 – Applications will only be accepted by e-recruitment: <a href="http://jobs.tcd.ie">http://jobs.tcd.ie</a></td>
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</table>
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 Trinity encourages and welcomes people from all backgrounds to join its staff community.

Trinity’s Diversity Statement can be viewed in full at: www.tcd.ie/diversity-inclusion/diversity-statement

Equality, Diversity, and Inclusion

The Professorial and Director position provides prospective applicants with a rewarding and fulfilling career opportunity in senior academia with links to external partners in industry, public policy and international research.

Equality, diversity, and inclusion, as well as a consideration of personal circumstances are a cornerstone of the ethos and practice of the University’s life and culture. In recognition of its achievements in gender equality, Trinity is currently ranked 6th in the world for gender equality in the Times Higher Education Impact Rankings 2021 and holds an Institutional Athena SWAN Bronze award (with the ambition of attaining a Silver level award by 2025).
Trinity College Dublin, The University of Dublin, invites applications for the post of Professor of Computer Science (2016)/Director of ADAPT SFI Research Centre (adaptcentre.ie). It is seeking individuals with a proven international track record of research, of distinguished and effective academic leadership and a commitment to innovative teaching.

The Professor of Computer Science (2016) is a permanent and full professorial Chair position in the School of Computer Science and Statistics within the discipline of Artificial Intelligence (AI). The duration of the role of Directorship of ADAPT, a Science Foundation Ireland (SFI) Research Centre for AI-Driven Digital Content Technology, is dependent on continued funding (currently secured until Dec 2026).

This combined post of Professorial Chair of Computer Science (2016) and Director of SFI ADAPT Centre, presents an exciting opportunity for an academic to lead research at scale and play a strategic role in shaping research internationally. The post will enable the candidate to build upon already very strong international academic and industry collaborations as well as initiate new ones.

The successful candidate for this post will have an exceptional research profile with a demonstrable and sustained ability to: engage in research and publish in the highest impact journals & conferences; raise significant research funding aligned with the national priority research areas of the School, the Centre and wider interdisciplinary research initiatives; lead successful and impactful collaboration with industry; undertake applied research & innovation and an ability to drive international initiatives and provide strategic and forwarding-thinking leadership within their research field.

Candidates for the position should be internationally recognised scholars in some of the following research areas: artificial intelligence, semantic knowledge modelling, and/or data driven analytics. Relevant specialisations within these areas would include: machine learning, natural language processing, knowledge graphs, personalisation, information retrieval and recommendation and other emerging areas of Human Centric AI.
Hosted by the School of Computer Science & Statistics Trinity College Dublin (TCD), ADAPT is a world-leading SFI Research Centre in the area of Human Centric AI. The Centre is a key strategic research Centre for Trinity College Dublin, involving all academics within the AI Discipline in the School of Computer Science & Statistics as well as many academics both across the School and broader University Faculties. The Centre is the national research centre for AI and Digital Content Technologies and spans eight other Irish academic institutions which, in totality, includes over 50 academic Professors and over 300 researchers. It was established in 2015 and is now in its 2nd phase of national funding (Jan 2021 - Dec 2026).

The ADAPT Centre is pioneering human-centric AI techniques including natural language processing, machine learning, data analytics, video and speech processing, human-computer interaction, personalisation and immersive technologies (VR/ AR) as well as setting the standards for data governance, privacy, and ethics for digital content. ADAPT’s vision is to shape future AI technology so that it maximises and empowers humans to help create a more balanced digital society. ADAPT’s mission is to research the next generation of technology which empowers individuals, enterprises and society by pioneering new forms of proactive, scalable and integrated AI-driven media technology (text, image, video, speech and AR/VR). It directly addresses the key challenges of the digital world of the future, including researching new theories, techniques and technologies to enable human control, inclusion and accountability of AI.

ADAPT’s strategy encompasses multidisciplinary research investigating the technological aspects of human-centric AI alongside scholars from medicine, social sciences, ethics, business and law. Research in ADAPT explores the individual, enterprise and societal perspectives on human-centric AI in multiple sectors including Healthcare, Digital Humanities, Business, the Environment and Sustainability. The Centre is careful to balance improved capacity in AI research and innovation with the individual empowerment and social cohesion needed to realise its benefits.
The position of established Professorial Chair is the highest academic post in the University. Such positions necessitate international academic distinction with the capacity to provide leadership in the development of the discipline and the successful promotion of research and teaching. The appointee would have the skills to effectively represent the discipline both within and external to the University and would be encouraged to act as Head of Discipline or School at some stage in the future.

In addition, this Professorial Chair will take up the Directorship of the ADAPT Centre which is a world leading research centre in Human Centric AI and is internationally benchmarked against AI research centres globally. The Professorial Chair will further enhance the already significant international recognition and leadership of the School and the ADAPT Centre.

The prestigious position will enable the Professorial Chair to influence and direct the strategic development of AI and ICT research both nationally and internationally.

The Professor will:

- Contribute to maintaining and strengthening the scholarly environment within Trinity so as to attract researchers of the highest quality and to facilitate their contribution to scholarship.
- Strengthen links both among researchers within the School & the ADAPT Centre and across other Schools and Centres within Trinity and other universities and external organisations.
- Engage in national and international research initiatives, allowing Trinity to make a distinctive contribution to scientific life both locally and globally.
- Contribute to the School’s research-led teaching in both undergraduate and postgraduate programmes, particularly in the broad area of AI.
- Assist and provide leadership in the School in attaining its goal of increasing interdisciplinary research activities e.g. Engineering, Environment and Emerging Technologies (Trinity E3 initiative).
- Secure competitive peer reviewed research funding of scale, influence and impact.
- Exercise a defined leadership role within the School of Computer Science and contribute to public engagement on behalf of the School.
- Contribute to the overall life of the University.
The Director of ADAPT SFI Research Centre role

The Professorial Chair of Computer Science (2016) is combined with the strategic Directorship of the ADAPT Centre. The Director of ADAPT has both a strategic and day-to-day role. On a strategic level the Director provides leadership, manages the interaction with SFI and guides the direction of ADAPT. The day-to-day level requires overseeing the Executive Management team (consisting of the executive director of ADAPT, and a team of dedicated senior business and administrative management professionals) to ensure the Centre is delivering on its remit and its SFI and TCD partnership commitments. The current funding cycle for SFI continues to at least the end of 2026 but the Director’s role will be a driving force in evolving the Centre beyond that date.

At the outset, the Directorship is intended to span at least the duration of the current SFI funding (currently up to the end of 2026). A key duty of this role is that the successful candidate maintains and nurtures the relationship between ADAPT and the key educational mission of Computer Science and Statistics and the University at large.

The Director will:

• Provide long-term strategic leadership & vision for the ADAPT Centre in order to achieve and sustain research excellence.
• Develop and execute an agile research strategy for ADAPT that incorporates all aspects of academic research, industry engagement and commercialisation and allows for the exploitation of existing strengths, as well as the expansion and future growth of the Centre.
• Drive ADAPT’s industry collaboration and economic impact with support from the ADAPT Executive Management team and relevant Principal Investigators.
• Ensure an open, productive, and collaborative partnership with SFI which underpins the effective delivery of the ADAPT programme of Scientific Excellence and Impact.
• Drive interdisciplinary collaboration across Trinity College’s existing Institutes and Centres.
• Further enhance TCD’s leadership in the fundamentally important ICT area of AI.
• Foster an environment within ADAPT that welcomes and actively encourages new participants, collaborates effectively with industry and partner Higher Education Institutions (HEIs), delivers research excellence and fosters a culture of collaboration, trust and respect.
• Initiate and guide other centre-wide collaborations of strategic importance with other SFI centres in Ireland and relevant institutions abroad and to continuously build the ADAPT Centre brand and identity within the Centre as well as publicly.
• Deliver international excellence through benchmarking ADAPT against its international peers.
• Execute overall responsibility for the financial management of the Centre and for reporting on its progress and performance to SFI and the ADAPT Governance Board.
Qualifications and Experience

The Professor will have:

• A doctoral degree in Computer Science or cognate discipline.

• A sustained record of high-quality, impactful published research, competitive research funding, excellence in postdoctoral and PhD research supervision and high achievement in teaching.

• An internationally recognised thought leadership profile within their research discipline.

• 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:

• Lead a world-class research programme in his or her own field, direct outstanding research teams, publish in the highest quality journals and raise significant national and international research funds.

• Establish world recognised research expertise in some of the following areas: artificial intelligence, knowledge and data engineering, or digital analytics, 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.

• 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 and play a key role in the development of inter-institutional research collaborations, nationally and internationally.

• Engage/collaborate 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 excellence in teaching and supervision at undergraduate and postgraduate level.

• Present and communicate ideas and concepts clearly.
Skills & Competencies

• Evidence of sustained and impactful scholarly research, reflected in first class publications, patents, product development leadership, or related industrial metrics of research productivity, competitive research funding of scale from prestigious sources, and other key measures of esteem, such as keynote presentations, editorships of respected journals, membership of international societies, committees, editorial boards, and through reviewing and refereeing activities.

• Demonstrate an ability to lead and manage teams by building and sustaining trusted and effective collaborative relationships with academic peers.

• Evidence significant experience in: curriculum design; delivery of undergraduate and postgraduate teaching; assessment at University level; innovations in teaching; effective postgraduate research supervision and a demonstrable personal commitment to excellence in teaching.

• Evidence of a capacity for inspirational leadership and the ability to develop a strategic vision for the School and the ADAPT Research Centre and to contribute to the strategic direction of the University, including a record of significant service at a high organisational level.

• Demonstrate an ability to lead and manage teams, build and sustain trusted and effective collaborative relationships with academic peers.
School of Computer Science and Statistics

The School was established in July 2005 following the merger of the Departments of Computer Science and Statistics which celebrated their 50th anniversaries in 2019 and 2017 respectively. Today, the School comprises 68 academics, 40 support staff and over 100 research staff and five academic disciplines:

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

The School is internationally recognised for the quality of its research and teaching and is the leading School in Ireland and is consistently ranked in/around the top 100 Computer Science Schools worldwide (QS Subject Rankings ranked 91st 2023).

The School offers a wide range of undergraduate and taught postgraduate degree programmes attracting around 1,200 registered students and 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 the School of Computer Science and Statistics exploit the emergence of data and its analysis as a driver in many fields of Computer Science and Statistics.

In addition to the Science Foundation Ireland (SFI) ADAPT Research Centre, the School also hosts SFI Research Centres, in Telecommunications (entitled CONNECT) and is a partner in two further SFI Research Centres (Insight and Lero).

The School currently participates in nine European Commission funded projects, three of which it coordinates. The School has signed research contracts in excess of €100 million over the last six years from a range of national, international and industrial sources including SFI, Enterprise Ireland and the European Commission’s Horizon 2020 Framework Programme.
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, environment, e-learning and telecommunications management domains. Its key research areas include: natural language and media processing, data analysis, machine learning, multi-agent systems, 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). In cooperation with the ADAPT Centre, the AI Discipline hosts initiatives in Health Informatics, Learning Technologies and Digital Engagement.
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 has embarked upon 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 School of Computer Science and Statistics along with the ADAPT SFI Research Centre form a key component of the E3 initiative across the University.

The E3 initiative is premised on the realisation that human thirst for knowledge is unquenchable and is coupled with the unrelenting adoption and deployment of advanced technologies. However this must co-exist within a context in which 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.
Trinity is home to the famous Old Library and to the historic Book of Kells as well as other internationally significant holdings in manuscripts, maps, and early printed material. The Trinity Library is a legal deposit library, granting the University the right to claim a copy of every book published in Ireland and the UK. At present, the Library's holdings span approximately 7 million printed items, 500,000 e-books and 150,000 e-journals. With over 130,000 alumni, Trinity's tradition of independent intellectual inquiry has produced some of the world's finest, most original minds including the writers Oscar Wilde and Samuel Beckett (Nobel laureates), the mathematician William Rowan Hamilton and the physicist, Ernest Walton (Nobel laureate), the political thinker Edmund Burke, and the former President of Ireland Mary Robinson. This tradition finds expression today in a campus culture of scholarship, innovation, creativity, entrepreneurship, and dedication to societal reform.
Applications will only be accepted through e-recruitment (https://jobs.tcd.ie)

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

1. Cover Letter.
2. Comprehensive curriculum vitae including full data on publications.
3. Name and contact details (i.e. address, email etc.) of three referees.
4. Statement on their vision for the future development of AI Discipline in Trinity - maximum 2 pages.
5. Research plan (summarising research accomplishments to date, and a research vision they are planning to conduct in the next five years in relation to the ADAPT Centre, together with plans for securing competitive research funding) - 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 Gregory O’Hare, Head of School of Computer Science and Statistics & Professor of Artificial Intelligence: gregory.ohare@tcd.ie
- Professor Vincent Wade, Professor of Computer Science (Est 1990): vincent.wade@tcd.ie