



Trinity College Dublin

Coláiste na Tríonóide, Baile Átha Cliath

The University of Dublin

Job Description

Comp ID:	038083
Job Title:	Assistant Professor in Computer Science (Artificial Intelligence)
School/Department:	School of Computer Science and Statistics
Job Category and Level:	Academic; Assistant Professor (Specific Purpose Contract)

The Purpose of the Role

The School of Computer Science and Statistics at Trinity College Dublin is a collegiate, friendly, and research-intensive centre for academic study and research excellence. The School has been ranked #1 in Ireland, a top School in Europe, and top 100 Worldwide (QS Subject Rankings 2018, 2019, 2020, 2021,2023).

The School is seeking to appoint an Assistant Professor in Computer Science on a specific purpose contract, who will join the Discipline of Artificial Intelligence. The specific purpose of this appointment is to cover the secondment of a permanent academic staff member to a College Officer position. College Officers are normally seconded for a period of 3 years. The successful candidate will be an outstanding researcher and teacher with a strong international research track record and the potential to become a research leader. A strong commitment to teaching, research excellence, developing academic and industrial research partnerships, and the ability to establish a dynamic, high impact, world-class research programme are essential. Candidates in all human facing aspects of AI will be considered. The successful candidate will be expected to contribute to undergraduate and/or postgraduate teaching in the School.

Context

The successful applicant must have a PhD in Computer Science or a cognate discipline. The School particularly welcomes applicants who will play an active role in interdisciplinary research within the School, E3 and the University. The E3 initiative is an ambitious project to expand education and research activities across three of its Schools: Computer Science and Statistics, Engineering, and Natural Sciences.

Applications are encouraged from candidates working in areas including, but not limited to: machine learning, recommender systems; information retrieval; natural language processing; multi-agent

systems, federated learning, neuro-symbolic AI, Trustworthy and Ethical AI, collaborative robotics/UAVs, AI-driven digital engagement that are multi-modal, task-oriented, personalised, context-aware, explainable and trustworthy; and approaches to digital engagement employing deep neural networks or knowledge graphs. The post holder will join a vibrant School, top ranked in Ireland, and *may* be affiliated with the ADAPT Research Centre for Digital Content Technology which pioneers new forms of proactive, scalable and integrated AI-Driven Digital Content Technology that empower individuals and society to engage in digital experiences with control, inclusion and accountability.

Main Responsibilities

Teaching

- As part of normal teaching duties, the appointee is obliged to give instruction and supervision, as directed by the Head of School (or designated Head of Discipline), to undergraduate and postgraduate students of the University in courses and programmes organised by the School.
- It is expected that the appointee will be responsible for delivering teaching in digital engagement, machine learning, natural language processing, information management and knowledge engineering as well as introductory topics in computer science.
- Such duties include curriculum and course design, preparation and delivery of lectures, tutorials and general examination and other assessment duties.
- The appointee is also required to be available to students for academic guidance and advice.
- In some disciplines, academic activities may also include laboratory, workshop or clinical instruction, supervision of fieldwork, site visits and other off-campus activities.

Research

- The appointee should have a desire to become a thought leader and a researcher of repute within their chosen research area.
 - As part of their research duties, the appointee is required to engage in research and/or other creative and innovative activity as appropriate to the Discipline.
 - The appointee is required to disseminate their research in high impact academic publications: journals, conferences, or other outlets as appropriate.
 - The appointee is encouraged to actively pursue initiatives by which to seek/secure funding for research in their own field and/or interdisciplinary or multidisciplinary research as appropriate.
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- The appointee is also required to participate in postgraduate research supervision including student recruitment, thesis definition, preparation, advice and regular advisory and guidance meetings.

Contribution and Scholarly Activity

- As part of the contribution to the School and University, the appointee is required to participate in academic administration at School level (as directed by the Head of School), and/or University level.
 - In representing the University externally, the appointee is required to maintain the highest professional standards.
 - The appointee is also required to commit to engage in scholarly activity such as, but not limited to, refereeing for journals, external examining, membership of learned societies, advisory bodies and peer review panels.
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Person Requirements

The role-holder will require the following knowledge, skills and attributes for successful performance in the role.

Qualifications

- The successful candidate must have a PhD in Computer Science or a cognate discipline.

Knowledge & Experience

The successful candidate will be expected to clearly demonstrate the following:

Teaching

Essential:

- A demonstrable ability to provide high quality lectures and practical classes in computer science to undergraduate and postgraduate students.
- Evidence of a personal commitment to excellence in teaching.
- Excellent communication and interpersonal skills.
- Experience of developing new modules and/or teaching material and being able to critically assess existing material for revision.

Desirable:

- Experience of using innovative teaching methods.
- Experience of supervising undergraduate and postgraduate dissertations.

- Evidence of high-quality teaching.
- Experience of working collaboratively and effectively in an inter and multidisciplinary environment.

Research & Scholarship

Essential:

- Proven record of excellence in artificial intelligence research demonstrated by a strong publication record in peer-reviewed journals and conferences.
- Proven record and ability to contribute to the field of Computer Science in human-facing aspects of AI. Aspects of interest include, but are not limited to: machine learning, recommender systems; information retrieval; multi-agent systems, federated learning, natural language processing; collaborative robotics; neuro-symbolic AI; forms of AI-driven digital engagement that are multi-modal, task-oriented, personalised, context-aware, explainable and trustworthy; developing new understandings of AI ethics and accountability; and approaches to digital engagement employing deep neural networks or knowledge graphs.
- Demonstrate research plans that complement the strategic plans of the School of Computer Science and Statistics.
- Evidence of, or potential to establish, a sustained record of high-quality research and publication.
- The potential to attract graduate students.
- Participation in research conferences and seminars.
- Ability to engage in research collaboration with industry and across disciplines.

Desirable:

- Demonstrated ability to secure competitive research funding.
- Demonstrated ability to lead and oversee research projects.
- Evidence of research collaboration with industry, society and universities.

Engagement with Discipline & Society

Desirable:

- Experience of reviewing papers for scholarly journals and conferences.
- Experience of organizing research seminars, recruitment initiatives and other scholarly events.
- The ability to participate in academic administration at School, and/or University levels.
- Experience of engagement with the public on matters of research or education.

- Ability to co-ordinate, manage and develop modules and courses in the School.
- Ability to establish targets and goals to support the School and College strategies.
- Experience of contributing to the wider work of a university or research institution.

Expected Skills and Competencies

- Highly motivated and driven by a desire to succeed.
- Excellent communication skills.
- Good organizational skills.
- Strong leadership skills.
- Ability to work effectively as member of a team.
- Honesty and integrity.
- Ability to be flexible when necessary.
- Willingness to contribute to the Discipline, School, College and the wider community.
- Ability to take the initiative.
- A commitment to own professional development.
- A commitment to: student care, dignity and respect, advancing gender equality and equal opportunities.

In addition, candidates will be assessed on their potential contribution to the School, College and the wider community.

Application Information

Applicants should provide the following information:

1. A comprehensive curriculum vitae, including a full list of publications.
2. The names and contact details (i.e. addresses, e-mail, etc.) of three referees.
3. A research plan summarising research to be carried out in the next two years and including sources of funding – max 2 pages.
4. A teaching statement summarising teaching experience and approach – max 2 pages.

PLEASE NOTE:

- Candidates who do not submit this additional information may not be considered for shortlisting.
- Candidates should note that the interview process for this appointment will include the delivery of a presentation to the School.

Further Information for Applicants

For further information about the School of Computer Science and Statistics, see:

<https://www.tcd.ie/scss/>

For further information regarding E3 see:

<https://www.tcd.ie/e3/>

For further information about Trinity College Dublin, see:

<https://www.tcd.ie/>

<https://www.youtube.com/watch?v=DbZALsDfLuU>

<https://www.youtube.com/watch?v=3YN6asK2ixw>

Candidates wishing to discuss the post informally and in confidence should email;

- Professor Owen Conlan, Head of the Discipline of Artificial Intelligence, at
E: owen.conlan@scss.tcd.ie and/or
- Professor Gregory O'Hare, Head of School of Computer Science & Statistics,
E: Gregory.OHare@tcd.ie