

Full Professor of Computing (Multimodal Information Processing) Permanent Contract

DCU School of Computing Faculty of Engineering and Computing

Full Professor of Computing (Multimodal Information Processing) Permanent Contract

DCU School of Computing Faculty of Engineering and Computing

The Senior Academic Leadership Initiative

Applications are invited from suitably qualified candidates for a new post of Full Professor of Computing (Multimodal Information Processing) under the Senior Academic Leadership Initiative (SALI) Call 2019, in line with the requirements set out in the Higher Education Authority (HEA) Call document https://hea.ie/assets/uploads/2019/06/FINAL-Call-document-2019-06-21.pdf

This SALI Programme is managed by the Higher Education Authority (HEA), on behalf of the Department of Education and Skills (DES). Following a competitive process based on an annual Call for applications from higher education institutions (HEIs), the HEA approved two new and additional senior academic leadership posts for our institution in the areas of Computing (Full Professor of Computing – Multimodal Information Processing), and Physical Science (Full Professor of Plasma Physics) to assist in accelerating gender balance at senior levels.

Dublin City University

Dublin City University (http://www.dcu.ie) is a research-intensive, globally engaged, dynamic institution that is distinguished by both the quality and impact of its graduates and its focus on the translation of knowledge into societal and economic benefit. DCU prepares its students well for success in life, and in the workplace, by providing a high-

quality, broad education appropriate to the challenges and opportunities of the 21st century. As Ireland's University of Enterprise, it is characterised by a focus on innovation and entrepreneurship and a track record of effective engagement with the enterprise sector. Excellence in its education and research activities has led to its consistent position in the rankings of the world's top young universities (e.g. THE 100 Under 50).

DCU is seeking to make a strategic appointment to support existing academic and research leadership in the area of Multimodal Information Processing within the DCU School of Computing, home of the ADAPT Centre for Digital Content Technology. The DCU School of Computing, incorporating the DCU ADAPT Centre, is seeking a talented world-leading researcher to join its strong research team.

ADAPT Centre for Digital Content Technology

Co-led by DCU, the ADAPT Centre (https://www.adaptcentre.ie/) is Ireland's global centre of excellence for digital content technology. It combines the expertise of researchers at eight universities with that of its industry partners to produce ground-breaking digital content innovation.

ADAPT brings together more than 250 researchers who collectively have won more than €200m in funding and have a strong

track record of transferring world-leading research and innovations to more than 170 companies. With €100M in research funding from Science Foundation Ireland (SFI), industry and Europe, ADAPT's research and technologies will continue to help businesses in all sectors and drive forward future Web engagement in drivable and attentive AI applications.

The Appointee will have the benefit of interaction and collaboration with the wider ADAPT research teams: a significant body of researchers, including PhD students, post-doctoral researchers, Research Fellows and ADAPT staff working on aspects of Language Technology, Machine Translation, Personalisation, Multimodal Processing, VR/AR and Privacy and Ethics across the eight partner universities in ADAPT.

This is an exciting time for the ADAPT Centre as it transitions from the first phase of SFI funding to the phase II extension from 2021-26. Accordingly, the successful candidate has the perfect opportunity to shape their future research goals by contributing to the envisaged programme of work during the next cycle of ADAPT.

DCU School of Computing

This post is in the DCU School of Computing (http://www.computing.dcu.ie), which has earned a strong reputation for excellence in research and in teaching at undergraduate and postgraduate level since its foundation forty years ago. A key element of its innovative approach is to anticipate new directions in computing, and it has programmes in Data Science, Data Analytics, Software Engineering, Artificial Intelligence, Cloud Computing as well as Enterprise Computing. The School meets the challenge of a fast-changing technology through strategic development of our portfolio of teaching and research. The School, home to

a large number of PhD students, is an active centre of research and innovation. It offers a dynamic and internationally-focused environment in which the chosen candidate can advance their academic career. Members of staff have collaborative links with a range of national and international research centres. In addition to ADAPT, the School is a major stakeholder in another Irish SFI Research Centre, specifically: the Insight Centre for Data Analytics. Furthermore, staff are significantly involved in a number of other research groups including: Lero the Irish Software Research Centre, and the Advanced Research Computing Centre for Complex Systems Modelling (ARC-SYM).

The Position

Reporting to the Head of School, the successful candidate will be an internationally recognised academic in the field of Multimodal Information Processing. committed to the pursuit of leading-edge research, who will help to support strategic research leadership in the ADAPT Centre and across DCU. The successful candidate will have a demonstrated track record in Multimodal Information Processing. with a specialism in at least one of the following areas: text analytics (natural language processing), speech and audio processing, image processing and video processing. The successful candidate will be expected to extend DCU's internationally recognised expertise in these areas. The successful candidate will also be expected to contribute to teaching, curriculum development and administrative activities in the DCU School of Computing across all levels. This position presents an exciting opportunity for an individual to make a significant contribution to the future of DCU as it enters its next stage of major development.

Key Responsibilities

Research

To lead research activity in the DCU School of Computing by:

- Publishing new ideas and findings in top tier international journals and conferences.
- Seeking funds from external agencies and/or organisations to support personal and School research initiatives.
- Leading the development of collaborative and interdisciplinary research within the School and wider University.
- Providing research mentorship to early career academics.
- Leading the dissemination of research via the hosting of research conferences, seminars etc.
- Enhancing the reputation of the School in the international research community via conference presentations, journal editorships, external examining, etc.
- Developing and leveraging international research networks to enrich the research activity of the School.
- Demonstrating industrial and societal impact of that research, as well as a track record in funding diversity.
- Enriching the research culture and environment in the School.

The Appointee can be expected to participate in research-related activities such as research student supervision, PhD thesis examination and related duties.

Teaching

To lead teaching and learning activity in the DCU School of Computing by

- Delivering teaching in a manner consistent with the highest academic standards.
- Using a wide range of teaching and assessment methodologies which foster a deep approach to learning and which equip students with the skills and attributes needed to be lifelong learners.
- Engaging in research-led teaching, supervise capstone projects and participate in other teaching-oriented activities.
- Supporting innovation in teaching, transnational and digital provision of programmes, engaging with international travel and new technology as needed.
- Leading the design and development of new programmes and modules that align with the School's strategy.
- Enriching the scholarship of teaching within the School.
- Fostering a culture of teaching innovation within the School.
- Contributing to the activities of the School's Centre for Executive and International Education

Leadership/Management/Service

To contribute to the leadership, management and administration of the DCU School of Computing and the Faculty by:

 Delivering management and service roles to a high standard (including as required roles such as, Head of School, Associate Dean and Executive Dean).

- Active engagement in accreditationrelated activities.
- Contributing proactively to relevant School and University committees, working groups and meetings.
- Engaging in, and contributing to, staff development activities.

Consistent with this level of seniority, the Appointee will be required to contribute to the administration and the leadership and management of the ADAPT Centre, DCU School of Computing, DCU Faculty of Engineering and Computing, and the wider University.

External Engagement

To enhance the reputation of the DCU School of Computing through engagement in, and leadership of, external academic, business (including consultancy), professional, public sector and community activities (approved by the Executive Dean, where appropriate).

Person Specification/Experience Requirements

Applications are invited from academics who are active researchers within the broad area of Multimodal Information Processing. The successful candidate will have an international research profile and a track record of publications in high-quality international journals and conferences, with an ongoing commitment to excellence in

teaching and learning. Applicants must possess a doctorate in Computing or a related discipline. Applicants should be able to demonstrate an active research programme with potential for future publication and interaction with enterprise partners, and should have a track record of research supervision and income generation through research and interaction with enterprise partners. Experience in industry is desirable.

Candidates must demonstrate excellent interpersonal and communication skills consistent with the highest quality of teaching, research, management and external engagement, together with evidence of successful teamwork and a collegial approach. The successful candidate will play an important role in the further enrichment of the School's national and international reputation, and she/he must display clear leadership attributes and skills and have the ability and interest to inspire and motivate colleagues with regard to all areas of activity of the DCU School of Computing.

Mandatory Training

The post holder will be required to undertake the following mandatory compliance training: University Orientation, GDPR and Compliance. Other training may need to be undertaken when required.

Essential Role and Application Information

Section 1: Introduction

1.1 Call for applications

Applications are invited from suitably qualified candidates for a new post of Full Professor of Computing (Multimodal Information Processing) under the Senior Academic Leadership Initiative (SALI) Call 2019, in line with the requirements set out in the Higher Education Authority (HEA) Call document https://hea.ie/assets/uploads/2019/06/FINAL-Call-document-2019-06-21.pdf

This SALI Programme is managed by the Higher Education Authority (HEA), on behalf of the Department of Education and Skills (DES). Following a competitive process based on an annual Call for applications from higher education institutions (HEIs), the HEA approved two new and additional senior academic leadership posts for our institution in the areas of Computing (Full Professor of Computing – Multimodal Information Processing), and Physical Science (Full Professor of Plasma Physics) to assist in accelerating gender balance at senior levels.

1.2 Background

Diversity is a key strength of Irish higher education. In recent decades our universities, institutes of technology, and colleges have been transformed, from predominantly national institutions catering primarily for school-leavers, to internationally oriented institutions engaged with an increasingly diverse student body, of all ages, backgrounds and gender identities.

Higher education legislation requires institutions to promote gender-balance among students and staff, and for the HEA to promote the attainment of equality of opportunity.

The HEA National Review of Gender Equality in Irish Higher Education Institutions (2016) was an important first step in highlighting the gender inequality that existed at senior academic levels in our HEIs. The HEA Expert Group report outlined a number of recommendations for the HEIs, HEA, research funding agencies and other key stakeholders. However, since the publication of the HEA Expert Group report, progress has remained exceptionally slow.

The DES proposed that a targeted and proportionate positive action should be taken to accelerate the achievement of gender equality objectives.

Such an approach is consistent with a range of Government strategies and policies including, for example:

- National Strategy for Women and Girls
- Equality Budgeting Initiative

The Gender Equality Taskforce identified significant measures that could accelerate progress in achieving gender equality in the Irish HEIs. Their Action Plan 2018-2020 encompasses a suite of initiatives to bring about sustainable organisational change and to empower a culture of gender equality in the HEIs for all staff, academic and professional, as well as management and support staff at all levels. Ambitious targets for the proportion of academic and professional, management and support staff of each gender to be in senior positions in 1, 3 and 5 years will be agreed with the HEA and monitored annually through the Strategic Dialogue process. Their report is available here http://hea.ie/assets/uploads/2018/11/Gender-Equality-Taskforce-Action-Plan-2018-

The HEA Expert Group and Gender Equality Taskforce both recognised that in addition to

2020.pdf

the organisational and culture change initiatives needed, a significant targeted positive action initiative was required in order to effect change within a reasonable time frame at the highest academic level in both sectors. Analysis of recruitment trends by the Gender Equality Taskforce highlighted that rate of change, over the period 2013 – 2017, at the most senior grades is slower than at other grades.

International evidence is that the establishment of new and additional gender-specific posts would be a proportionate and effective means to achieve rapid and sustainable change, and on that basis has the potential to be transformative for the higher education sector in terms of securing gender equality goals.

As part of the launch of the Gender Equality Taskforce Action Plan, it was also announced that a new Senior Academic Leadership Initiative (SALI) would be established.

Section 2

2.1 Objective of the Initiative

The Senior Academic Leadership Initiative aims to help achieve equality of outcome in the higher education sector. New and additional senior academic leadership posts have been funded in areas where:

- there is clear evidence of significant gender under-representation;
- where this appointment will have significant impact within the faculty/department/functional unit and the HEI;
- where they would be a proportionate and effective means to achieve accelerated and sustainable change within an institution.

These posts are new and additional to the sector, i.e. they are in addition to the existing

Employment Control Framework (ECF), and they will be funded through new and additional funding provided specifically to help progress gender balance among academic staff at senior levels.

The key objective of this Initiative is principally to attract outstanding female applicants both from within the sectors currently and internationally. The Initiative will also assist in increasing the number of women involved in the decision-making processes in the institutions, as advocated in the EU Commission Strategy on Promoting Equality in Decision Making.

In securing two posts under this initiative, our institution has demonstrated our commitment to gender equality. Our institution has also demonstrated plans for future developments in this area and has outlined the organisational and cultural initiatives in place to support the newly appointed staff.

While this Initiative gives priority to highly qualified female candidates within the boundaries of what is legally permissible, in order to address their underrepresentation; preferential consideration of female candidates is excluded if other reasons worthy of legal protection prevail. In exceptional circumstances, candidates who are in a minority or protected under Irish social legislation, or who also belong to an underrepresented minority in academic posts may be considered if the institution can clearly articulate reasons worthy of legal protection as to why they should be considered.

Section 3: Call Criteria and Application Guidelines

3.1 Applicant Eligibility

Two SALI posts have been approved for our institution in the areas of Computing (Full Professor of Computing – Multimodal

Information Processing), and Physical Sciences (Full Professor of Plasma Physics) by the HEA, and the applicant can only be appointed within these specific areas.

Only applicants who are suitably qualified will be appointed. If applicants do not meet the normal competition rules for appointment at Full Professorship, Professor/SL3 level, then the appointment will not be made.

This is a dedicated Call under the Senior Academic Leadership Initiative, and is an open competition for which both internal and external candidates will be eligible.

In line with the objectives of the HEA SALI Call 2019, applications from highly qualified female candidates will be prioritised within the boundary of what is legally permissible, in order to address their underrepresentation. However preferential consideration of female candidates is excluded if other reasons worthy of legal protection prevail. In exceptional circumstances, applications from candidates who are in a minority or protected under Irish social legislation, or who also belong to an underrepresented minority in academic posts may be considered if they can clearly articulate reasons worthy of legal protection as to why they should be considered.

3.2 Applicant Assessment Process and Guidelines

Dublin City University's normal recruitment procedures apply for appointment at Full Professorship, Professor/SL3 level.

In line with the HEA Expert Group recommendation 1.16, institutions are required to review the recruitment and assessment procedures currently being used to ensure that such processes are gender-proof. For example, institutions should consider how best to factor in time spent away from an academic career when asking

for measurable outputs, e.g. asking applicants to identify their top 3–5 publications/outputs with no time limits would negate periods of time spent away from an academic career, however asking for the publications/outputs over the last 5 years would disadvantage someone who has spent time away from their academic career

A key objective of the Initiative is to strengthen diversity at senior academic leadership level in Higher Education Institutions (HEIs) given the benefits that increased diversity would be expected to generate for HEIs as set out in the report of the Gender Equality Taskforce. Consequently, other capabilities and life experiences which have been acquired by applicants outside of the academic environment can be taken into account in assessing candidates, in so far as they are of importance for the suitability, performance and capability of applicants to perform senior academic leadership roles in higher education and to underpin the achievement of increased diversity at that level.

Section 4: Funding and Duration

The successful applicants will be permanent employees of Dublin City University, under its standard terms and conditions.