Lecturer in Computer Science

Full-Time Permanent (2)  
and Specific Purpose (1) Posts

Contract Type B

Ref #: 009894
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**Lecturer in Computer Science**  
**Contract Type B**

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JOB ADVERTISEMENT

Applications are invited for an appointment as Lecturer in Computer Science at the University of Galway (recently rebranded from NUI Galway). Up to three new posts will be filled as a result of this recruitment, including up to two permanent posts and one specific purpose post with a planned duration of 3 years.

For these posts, we are seeking candidates who can demonstrate a world-class research profile, or its potential from industry experience, as well as teaching expertise in one in the following specialisms:

A. Cybersecurity, particularly Secure DevOps;
B. Artificial Intelligence, including AI Safety;
C. Game Development;
D. Quantum Computing.

In their application covering letter, the candidate is requested to identify which one of these specialisms they wish to be considered for, and provide evidence of expertise in the specialism. The candidate should also indicate whether they wish to be considered for a permanent post, a Specific Purpose Contract post, or both.

The successful candidates will actively contribute to the University’s strategic vision for Computer Science, and will participate in research, teaching, student project supervision, and programme administration across a complementary portfolio of our undergraduate and postgraduate programmes.

The School of Computer Science is ambitious and growing, and we invite the new appointees to contribute to this together with us. The vision of the School of Computer Science is to build a strong and sustainable learning environment with world-recognised research that informs high-quality undergraduate and postgraduate teaching that is inclusive and relevant to the needs of our stakeholders and society in general. The School of Computer Science was initially established in 1991 as the Information Technology Discipline, and became a School in 2019, recognising its growth and significance. The School currently has 34 academic staff, 6 support staff and over 50 research staff, and is expanding. Every year in the past 6 years, the School has launched new degree programmes, and is committed to growing its research and teaching profile. The School of Computer Science is known for its research in theoretical and applied CS, and its high-quality and highly popular postgraduate taught programmes, complementing its strengths in undergraduate teaching.

Research contribution is of fundamental importance for these posts. The appointees must be capable of acting as principal scientific investigator on large-scale externally funded projects and will be expected to provide leadership and research supervision to the members of their research groups. They will be expected to attract R&D funding, and demonstrate clear plans to apply for major funding awards, for example, from Science Foundation Ireland and the European Research Council (ERC) Grant programmes. The appointees will also be required to develop national and international collaborations with academia and industry. The new appointees will be expected to disseminate their work through high quality peer-reviewed journals, high-impact conferences, and workshops.
The successful candidates will contribute to teaching of fundamental and applied computer science on our portfolio of undergraduate and taught postgraduate programmes, as well as participating in academic programme management, marketing and outreach activities. The appointed candidates will be expected to develop new curricula, prepare and deliver materials for online and classroom modes of delivery, supervise undergraduate and postgraduate students in their project work, and conduct related administrative duties.

Ollscoil na Gaillimhe – University of Galway has been inspiring minds since 1845 as a research-led university. It is one of the oldest and largest universities in Ireland. The campus community includes over 21,000 students and staff and 110,000 alumni located in over 100 countries across the world. University of Galway is counted among the Top 300 universities in the world, positioned in the top 2% in QS global rankings. Ours is an international university with global ambition, but with deep roots in the region and nationally. Our university is at the heart of a distinct and vibrant region, renowned for its unique culture, creative industries, medical technologies, marine ecology, tech sector, and innovation.

In Computer Science research and teaching, University of Galway holds a strong international reputation. In the Times Higher Education world university rankings by subject in recent years, Computer Science at University of Galway is ranked first or second in Ireland.

Academics in the School of Computer Science have a strong track record of research in topics including artificial intelligence; machine learning; data visualisation; data science; natural language processing; system modelling and simulation; games and digital media; cybersecurity; software engineering; and networking. The School includes members of the Data Science Institute (DSI) and the associated Insight SFI Centre for Data Analytics, which has a strong international reputation in data analytics. In addition, there are opportunities for academic staff to engage in collaborative research with other national research centres such LERO (the SFI Irish Software Research Centre), CONNECT (Ireland’s centre for future networks and communications) and Centres for Research Training funded by Science Foundation Ireland in topics including Artificial Intelligence (CRT-AI) and Virtual Reality (D-REAL CRT).

The School of Computer Science has a broad portfolio of popular and successful taught programmes at undergraduate and postgraduate level, including: The BSc in Computer Science & Information Technology, a 4-year programme with work placement that is professionally accredited; Higher Diploma and MSc in Software Design and Development; MSc in CS Artificial Intelligence; MSc in CS Data Analytics; a new MSc in CS Adaptive Cybersecurity; Postgrad Diploma in Data Analytics & Visualisation; Pg.Cert. in AI for Professionals; and online Postgrad Diplomas, one in Cloud Computing and Software Development, and one in in Cybersecurity and Software Development.

For informal enquiries, kindly contact Ms Deirdre King, School Administrator (deirdre.king@nuigalway.ie, +353-91-493259) or Professor Michael Madden, Chair of School of Computer Science (michael.madden@nuigalway.ie, +353-91-493797).

For additional information about the School of Computer Science, please see our website: School of Computer Science - University of Galway

Salary:
€ 58,917 to € 93,991 p.a (applicable to new entrants effective from January, 2011)
(This appointment will be made on the Lecturer scale in line with current Government pay policy)
Closing date for receipt of applications is 17:00 (Irish Time) on Thursday 13th July 2023. It will not be possible to consider applications received after the closing date.

Garda vetting may apply.

Appointments will be conditional on work authorisation validation. Further details are available at [www.dbei.ie](http://www.dbei.ie).

For more information and Application Form please see website: [Jobs - University of Galway](http://www.jobs.uigalway.ie). Applications should be submitted online.

Please note that appointment to posts advertised will be dependent upon University approval, together with the terms of the Employment Control Framework for the higher education sector.

University of Galway is an equal opportunities employer.

**Equal Opportunity Statement**

University of Galway is proud to be an equal opportunity employer and holder of an Athena SWAN Bronze award. We celebrate the diversity of our staff and students and work to support an inclusive environment free from discrimination and harassment.

We are committed to supporting all staff through a comprehensive suite of flexible working schemes, family-friendly policies, training and development, and staff networks. Further information on equality at University of Galway can be found at: [Office of the Vice President for Equality, Diversity and Inclusion - University of Galway](http://www.uigalway.ie/)

The School of Computer Science holds an Athena SWAN Bronze award, jointly with the Data Science Institute. We are deeply committed to making real and lasting changes to career development in supporting and advancing women throughout the pipeline including attracting more women into computer science at both undergraduate and postgraduate level, and the career development of postdoctoral researchers and staff.
JOB DESCRIPTION

Principal Duties and Responsibilities

The post-holder duties will include, but not be limited to, the following:

Teaching
To give instruction and supervision, as directed by the Head of School, to students of the University in courses and programmes organised by the School or to which the School contributes to another School or College. Such duties to include curriculum and course design, preparation and delivery of lectures, tutorials, project supervision and general examination and other assessment responsibilities. The post-holder is also required to be available to students for academic counselling and advice. Academic activities may also include laboratory or workshop instruction, supervision of fieldwork, site visits and other off-campus activities.

Research
To engage in research and other creative and innovative activity as appropriate to the discipline. The post-holder is required to disseminate their research in academic publications, other outlets as appropriate and to participate in postgraduate supervision. The post-holder is encouraged to engage in initiatives to seek research funding, as appropriate. The post-holder is also encouraged to promote and engage in the development of collaborative research.

Contribution and Scholarly Activity
To participate in academic administration at School, College and University levels as part of their contribution to the University. To engage with the wider community regionally, nationally and internationally from a civic, economic, social and cultural perspective as a contribution to the life of the University. In representing the University externally, the post-holder is expected to maintain the highest professional standards, thereby enhancing the reputation of the University. The post-holder is expected to engage in scholarly activity such as, but not limited to, refereeing of journals, membership of discipline related advisory bodies and peer review panels and work associated with external examinership.

The post-holder shall carry out these duties under the direction of the Head of the School or of an authorised senior member of the staff of the School.

The post-holder shall be a member of College/Colleges in accordance with University Statutes.

The hours of work are those prescribed under the Public Service Agreement in respect of Academic Staff.
ELIGIBILITY REQUIREMENTS

Essential Requirements:

- Qualifications:
  - A primary degree and a PhD degree in Computer Science or a closely related discipline.

- Teaching, Learning and Supervision:
  - Established track record of lecturing in Computer Science at University level, including curriculum development;
  - Knowledge and experience of technological innovations in teaching.

- Publications and Research:
  - Strong ongoing publication record as senior author in CS, in high-ranking international peer-reviewed journals, and clearly aligned to one of the specialisms;
  - Research funding record that includes evidence of having secured at least one competitively-awarded and peer-reviewed research funding grant;
  - Demonstrated ability to lead a team of researchers and to supervise PhD students;
  - Capacity to develop a world-class research programme, with evidence that the candidate’s research has an international profile.

- Strategy and Vision:
  - A research strategy that aligns with the School’s research areas, and that includes a multi-year plan for research funding acquisition, recruitment of Ph.D. students, and building on the candidate’s existing research track record;
  - A strong commitment to working with colleagues within existing research groups, and a willingness to develop and lead new research as appropriate;
  - A clear vision for how their teaching and research aligns to the requirements of the post and complements that of the School of Computer Science.

- Contributions, Collaboration and Communication:
  - Demonstrated capacity to conduct programme administration and management;
  - A commitment to contributing to new and existing undergraduate and postgraduate programmes, including the development of new modules and new programmes;
  - Demonstrated experience of working with industry and strong commitment to future industrial engagements;
  - Excellent communication and teamwork skills;
  - Capacity for leadership and strong ability to work well with people, including a commitment to develop collaborative relationships with other academics for teaching and research objectives.

Desirable Requirements:

- A number of years of post-doctoral experience in Computer Science;
- Experience of programme administration in a university environment;
- A formal qualification in Teaching & Learning.

The appointment will be made to the School of Computer Science.
## Appendix 2: Competency Framework for Lecturer (Contract Type B) Roles at University of Galway

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<th>Academic Excellence</th>
<th>Leadership Excellence</th>
<th>Organisational Excellence</th>
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| **CORE**
  - **Excellence in Research**
    The Lecturer (Contract Type B) furthers their discipline and contributes to the body of knowledge in their area through planning, carrying out and publishing/disseminating their own high quality research, building and leading research groups and providing supervision and support for postgraduate students to enable them to produce quality research. They keep up to date with relevant developments in their field and network and collaborate with others, both internally and externally, to optimise the value and relevance of the research being produced and to maximise the School's/Discipline's ability to attract research funding.
  - **Personal Effectiveness**
    The Lecturer (Contract Type B) is enthusiastic about their discipline and is committed to making their best personal contribution through employing excellent planning and organising, communication and decision making skills to achieve their goals and through working hard and being flexible in order to meet the multiple and changing demands of the Lecturer (Contract Type B) role.
  - **Strategy & Vision**
    The Lecturer (Contract Type B) should contribute to the strategic development of the discipline by developing a strong awareness of the wider environment, how the discipline is developing and how the School/Discipline can develop in the long term to optimise its contribution. He/She must have the ability to make a strong case for the development of new programmes or engaging in joint programmes or collaborations that they feel will add long term value to the School/Discipline.
| **CAPACITY TO DEVELOP**
  - **Leading Others**
    The Lecturer (Contract Type B) must work well with others, providing leadership and direction to students, colleagues and support staff in relation to projects or areas of work that they are leading on. They effectively encourage, support and manage the contributions of others to deliver results for the discipline and to ensure that high standards are met.
  - **Collegiate & Community Contribution**
    The Lecturer (Contract Type B) values and engages in a collegiate approach to working with others, within their own discipline, school and university and also within the wider external community. S/he actively seeks to build effective networks and is willing to contribute their time and expertise to a range of broader university wide or community projects.

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| **Excellence in Teaching**
  The Lecturer (Contract Type B) develops and delivers quality teaching programmes which engage and inspire students at all levels and maximises their learning. They are confident in using a range of teaching techniques, are open to innovations in teaching and are focused on continually developing their own teaching skills. |

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<td><strong>Developing</strong></td>
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Competencies for Lecturer (Contract Type B) in University of Galway

ACADEMIC EXCELLENCE

Competency 1: Excellence in Research

The Lecturer (Contract Type B) furthers their discipline and contributes to the body of knowledge in their area through planning, carrying out and publishing/disseminating their own high quality research, building and leading research groups and providing supervision and support for postgraduate students to enable them to produce quality research. They keep up to date with relevant developments in their field and network and collaborate with others, both internally and externally, to optimise the value and relevance of the research being produced and to maximise the School’s/Discipline’s ability to attract research funding.

- Conducts high quality research that furthers the School / Discipline
- Publishes research frequently in high quality, peer-reviewed journals and presents research at high profile conferences
- Builds up collaborative links and networks with other organisations and keeps up to date with research in own area and what is happening in the international research community
- Goes to relevant conferences, and works with industry and other relevant external bodies to keep research relevant
- Writes strong research and grant proposals which sells the value and potential benefits of a piece of research
- Effectively plans research and can estimate the time and resources required to complete it, and delivers on schedule
- Provides quality supervision and guidance in relation to the research of undergraduate and postgraduate students, motivating and encouraging them to help them overcome problems

Competency 2: Excellence in Teaching

The Lecturer (Contract Type B) develops and delivers quality teaching programmes which engage and inspire students at all levels and maximises their learning. They are confident in using a range of teaching techniques, are open to innovations in teaching and are focused on continually developing their own teaching skills.

- Provides a high standard of teaching to students across a range of programmes in their discipline
- Provides mentoring and supervision to PhD students / projects / programmes as required
- Leads on/contributes to the development and review of the curriculum and programmes delivered and encourages other staff to contribute
- Confident teaching student groups of various sizes and at different levels
- Competent and consistent in setting and organising/co-ordinating the marking of examinations
- Demonstrates, through their teaching, strong enthusiasm for their subject area and a high level of up to date knowledge and expertise in their area
- Competent in a range of teaching methods and strategies and is willing to continually evaluate and develop their teaching methods and skills, looking for better ways of teaching
- Open to using technological innovation as part of their teaching and keeps up-to-date with developments in this area
- Organises and structures their teaching logically to help maximise learning and ensure a good student experience
- Keep students engaged by incorporating research and current topics into teaching and informing their teaching by what is going on in the wider environment and including external input
- Demonstrates a commitment to students and gives the time and effort to engage with, and be accessible to students
- Has the ability to give constructive and timely feedback and advice to students
- Balances a concern for students with a focus on being consistent and equitable in their treatment
- Benchmarks teaching programmes against those in other universities and aims to ensure they are of a high standard
- Works with students to prevent plagiarism, and puts systems in place to detect and manage plagiarism

**LEADERSHIP EXCELLENCE**

*Competency 3: Personal Effectiveness*

The Lecturer (Contract Type B) is enthusiastic about their discipline and is committed to making their best personal contribution through employing excellent planning and organising, communication and decision making skills to achieve their goals and through working hard and being flexible in order to meet the multiple and changing demands of the Lecturer (Contract Type B) role.

- Demonstrates excellent planning, organisation and prioritisation skills, to effectively meet deadlines and to deliver to high standards across the areas of teaching, research and administration
- Has good time management skills to manage a heavy workload
- Demonstrates clear commitment and is willing to work hard for the success of their area
- Has a reflective approach to their own work and can consistently review it in order to ensure it is of the highest possible standard
- Active in reviewing systems and processes to maximise the time available for research and teaching
- Flexible and adaptable in managing competing demands while protecting core values
- Shows a strong commitment to keeping up to date and maintaining professional competence
- Is resilient and maintains a positive outlook in a challenging and pressurised environment
- Takes a balanced approach to the demands of the role and is flexible with what the role encompasses
- Understands the importance of budget management and raising programme funds, and can assimilate financial information and report back on financial matters
Competency 4: Leading Others

The Lecturer (Contract Type B) must demonstrate a capacity to develop skills and competence to work well with others, providing leadership and direction to students, colleagues and support staff in relation to projects or areas of work that they are leading on. They effectively encourage, support and manage the contributions of others to deliver results for the discipline and to ensure that high standards are met.

- Works constructively within a collective collegiate structure
- Consistently works with others to ensure high standards in all aspects of the role
- Is able to get the most out of people and to secure their support and cooperation in relation to work they are leading/managing
- Gives clear instructions in relation to the contribution expected from others
- Has the ability to manage and encourage others to deliver what is required
- Actively supports the career development of postgraduate students and newer colleagues
- Organises and delegates work in a way which is consistent and fair and makes best use of resources
- Understands the importance of, and can use a range of strategies to, motivate students and support staff and colleagues
- Takes the initiative to put good ideas into practice

Organisational Excellence

Competency 5: Collegiate and Community Contribution

The Lecturer (Contract Type B) values and engages in a collegiate approach to working with others, within their own discipline, school and university and also within the wider external community. S/he actively seeks to build effective networks and is willing to contribute their time and expertise to a range of broader university wide or community projects.

- Actively builds strong internal and external networks and collaborative links
- Participates in cross discipline working groups in addition to taking on roles in external institutions/agencies (with the necessary University approval in place)
- Takes time to build up positive working relationships with others and treats everyone fairly and with respect
- Assumes administrative/organisational roles and tasks to help ensure the smooth running of the School/Discipline
- Acts as chair on committees or acting as representative at school/college/university level and works to develop the skills needed to perform these roles effectively
- Makes an effort to understand and take account of different people’s views and perspectives
- Contributes outside the university to different committees, the local community, and voluntary organisations
- Encourages students to get involved in relevant external groups also, where appropriate
• Supports colleagues internally and with other universities in initiating collaborative enterprises/programmes
• Possess the negotiation skills required to achieve a balance between the university’s academic requirements with potentially competing requirements of external bodies

**Competency 6: Strategy and Vision**

The Lecturer (Contract Type B) should demonstrate a capacity to develop skills and competence to contribute to the strategic development of the discipline by developing a strong awareness of the wider environment, how the discipline is developing and how the School/Discipline can develop in the long term to optimise its contribution. He/She must have the ability to make a strong case for the development of new programmes or engaging in joint programmes or collaborations that they feel will add long term value to the School/Discipline.

• Has a clear overall vision for what the School/Discipline is trying to achieve and how their work fits in with the overall direction
• Understands how the discipline is developing and brings this to bear on their work
• Uses initiative to benchmark against other organisations and takes other opportunities to increase understanding of best practice across the system
• Knows what research is being done within their area and what type of research will attract funding from which sources
• Identifies opportunities for new modules and programmes by assessing what will be viable and of interest in the long term
• Uses judgement to build and sell a persuasive case for resources/new programmes on behalf of their area/college
• Creates, and takes advantage of, opportunities to market programmes to attract high quality postgraduate students
• Able to negotiate for an area while recognising the realities and the resource restrictions and is willing to change and adapt to meet future needs