

## **SFI Centre for Research Training (CRT) in Artificial Intelligence**

### **Fully Funded PhD positions (30-35 posts) across 5 Irish Universities**

Artificial Intelligence (AI) plays a significant role in the world today. Its impact is transformational, and it is disrupting society and industry alike. Over the last decade major advances have been achieved due to the availability of vast amounts of digital data, the availability of powerful computing architectures, and advances in AI techniques, such as machine learning.

The SFI Centre for Research Training in Artificial Intelligence was established in March 2019 with funding of over €14 million from Science Foundation Ireland and an additional €3.3 million from industry and academic partners. It is Ireland's national centre for PhD-level training in AI and will train more than 120 PhDs across four cohorts, with an intake of 30 students per annum for the next four years. The centre brings together five of Ireland's seven universities and a team of almost 60 supervisors across the country. This centre is a joint initiative between University College Cork, Dublin City University, National University of Ireland Galway, Trinity College Dublin, and the University of Limerick. We offer fully funded PhD scholarships inclusive of fees, a monthly stipend, and a budget for travel and training.

We invite applications from suitably qualified applications for places at the CRT for the cohort starting in September/October 2020. The four year fully funded program is available to those interested in producing cutting edge research with the potential to solve some of the world's most pressing issues. The successful candidate will be part of a group; the first of its kind in Ireland to lead and accelerate the trends in AI through the conduct of original research. We are seeking highly motivated applicants who are hard-working, creative and looking for a meaningful PhD. The successful individual will be adaptable, flexible and very willing to be mentored.

The objective of this PhD programme is to provide postgraduate research students, the core skills tools and techniques in the theory and application of Artificial Intelligence. The student will be exposed to and develop AI solutions to a wide range of domains including areas such as smart buildings mobility and transportation, autonomous vehicles, public service delivery, manufacturing, enterprise, cybersecurity, climate change, and environment agriculture, marine, food production and natural resources.

The CRT aims to deliver a world class bespoke PhD training programme that will train a new generation of scholars in AI while ensuring the highest level of ethical and responsible research throughout the students training and research. This will involve five strands of study taken from topics such as Recommender System & Personalisation; Optimisation and Constraint Programming; Natural Language Processing; Machine Learning; Visual Media Processing; Ethics of Data Analytics and Fair, Accountable, Transparent AI. Each strand will be delivered by an expert and will consist of an intensive week of blended learning activities- seminars, workshops, practical tasks, group work and independent preparation. Students will develop critical skills in identifying, critiquing and applying suitable AI-based solutions both individually and in groups and learn from external experts about the latest research developments.

## Requirements

Applicants should hold a 2.1 honours undergraduate degree or Masters degree in Computer Science, Computer Engineering, Data Analytics, Industrial Mathematics, Statistics, or relevant research areas. Ideally applicants will be able to demonstrate an interest in both theoretical and software engineering skills, with a keen interest in Algorithms, Artificial Intelligence, and related areas. We are especially interested in candidates with knowledge of Artificial Intelligence, Machine Learning Constraint Programming, Operations Research, and Wireless Sensors.

Candidates are required to provide evidence of English language ability as per local University guidelines.

UCC:

<https://www.ucc.ie/en/study/comparison/english/postgraduate/>

UL:

<https://www.ul.ie/international/non-eu-exchange/incoming-non-eu-exchange/english-language-requirements>

NUIG:

<http://www.nuigalway.ie/student-life/http://www.nuigalway.ie/international-students/yourcountry/englishlanguage/requirements/>

DCU:

<https://www.dcu.ie/registry/english.shtml>

TCD:

<https://www.tcd.ie/courses/postgraduate/how-to-apply/requirements/international.php>

**Funding:** Funding. All successful applicants will be awarded a tax-free stipend for a maximum of four years at a rate of €18,500 per annum. The CRT also pays tuition fees at the EU-level for all applicants. In many cases, non-EU applicants can have their fees set at the EU level, but this is on a case-by-case basis.

**Application process.** Prospective applicants should send their applications to:

<http://www.crt-ai.ie/apply.html>

Please send applications in PDF format only and must include the following:

- Curriculum Vitae;
- Cover letter explaining interest in research, referring explicitly to one or more of the areas listed above. (maximum 3 pages);
- Career Statement with justification as to why you want to complete a PhD (maximum 3 pages);
- Proof of degree and transcripts of results (single PDF);
- Any additional supporting document you would like to have considered (if applicable, single PDF.).

**Deadline:** Rolling call, the current round of applications closes on **February 29<sup>th</sup>, 2020**.

**Start date:** Studentships start from September/October 2020

**Location(s):** Cork, Limerick, Galway, Dublin