Post Title: MSc Studentship in Ethics of Artificial Intelligence

Post Status/Ref: Fixed Term, 2 years MSc Studentship in the Ethics of Artificial Intelligence

Research Group/Department/School: ADAPT Centre, School of Computer Science and Statistics and School of Religion

Location: O'Reilly Institute, Trinity College Dublin, Dublin 2.

Funding: Payment of tax-free stipend of €18,500k. In addition, payment of academic fees up to €5,500 per annum for two years.

Closing Date and Time: 12 Noon on 31st August 2018

Post Summary
Research into aspects of the ethics of intelligent media technology is well advanced, with significant research focused on e.g., the magnification of bias and discrimination with machine learning; the inscribing of social codes in the technologies; the risks associated with decision-making by algorithm; the opaque nature of such decision-making; concerns about the lack of transparency, and potential lack of reversibility. However, although there is a lot of public discussion about the basis on which the upper limits of ethical AI development can be determined, there has been little research to date on this topic. The 2017 ASILOMAR AI Principles refer to this as the capability caution, noting that this is one of the longer-term ethical issues that has yet to be addressed.

This research project investigates the ethical parameters of the upper limits of AI development, in order to identify and mitigate the risks associated with technological developments without limits. It will examine the question of the ethical parameters of the upper limits of AI development, how these limits can be established, what they entail for the technology development process, in the context of ADAPT research. In particular it will assess the validity and viability of the Asilomar AI Principles in the context of establishing the upper limits of AI development and will test these principles in the context of the upper limits of AI mediated interaction of people online.

The research will deliver a comprehensive literature survey of ethical problems and approaches that characterize the upper limits of AI development, an analytical structure for
examining a selected set of such issues and a framework for engaging a diversity of stakeholder in the examination of such issues.

The PhD position within ADAPT will be supervised by Prof. Linda Hogan, with co-supervision provided by Prof Dave Lewis and Prof Bert Gortijn (DCU).

**Duties and Responsibilities**
The successful candidate will work within a large group of Academics, Postdoctoral Researchers, PhD students and Software Developers. He/she will work directly with Professor Linda Hogan as part of the Ethics and Privacy Working-group of ADAPT. The successful candidate will have training and expertise in any aspect of ethics. The tasks to be performed as part of this position include:

- Conduct and complete research on the upper limits of AI as per the research project;
- Contribute to journal and conference publications;
- Present research and findings to peers and to the public;
- Undergo training to advance knowledge of ethics of AI;
- Contribute to activities to promote understanding of ethics in technology;
- Provide assistance to PI in advancing ethics programming;

**Person Specifications**
The successful candidate will have a primary degree in philosophy, theology or cognate area, with training in ethics, with a minimum achievement of Grade II.I

**Skills and Competencies**
The successful candidate will:

- Be knowledgeable in applied ethics;
- Display an understanding of the ethical issues in ICT, especially AI;
- Have excellent problem-solving and communication skills;
- Be capable of working in and learning from multi-disciplinary environments;
- Display strong organisational and administrative skills;
- Be highly motivated and committed to the advancement of ethics in technology

**Knowledge and Experience**
Knowledge and understanding of applied ethics, particularly ethics of technology, is desirable.

**Trinity College Dublin, the University of Dublin**
Founded in 1592, Trinity is at the nexus of tradition and innovation, offering undergraduate and postgraduate programmes across 24 schools and three faculties: arts, humanities, and social sciences; engineering, maths and science; and health sciences. Spread across 47 acres in Dublin’s city centre, Trinity’s 17,000-strong student body comes from all 32 counties of Ireland, and 16% of students come from outside the country. Of those, 40% are from outside the European Union, making Trinity’s campus cosmopolitan and bustling, with a focus on diversity.

As Ireland’s leading university, the pursuit of academic excellence through research and scholarship is at the heart of the Trinity education. Trinity is known for intellectual rigour, excellence, interdisciplinarity, and research-led teaching. Home to Nobel prize-winners such as scientist Ernest Walton and writer Samuel Beckett, Trinity draws visitors from
across the world to its historic campus each year, including to the Book of Kells and Science Gallery which capture the university's connection to both old and new.

**Background on the ADAPT Centre – [www.adaptcentre.ie](http://www.adaptcentre.ie)**

The ADAPT Centre is Ireland’s Centre of excellence for digital content technology. Funded by Science Foundation Ireland, ADAPT focuses on developing next generation digital technologies that transform how people communicate by helping to analyse, personalise and deliver digital data more effectively. ADAPT researchers are based in four leading universities: Trinity College Dublin, Dublin City University, University College Dublin and Dublin Institute of Technology. Our research is spearheading the development of next-generation digital technologies that enable seamless tech-mediated interaction and communication. The breadth of ADAPT's research expertise is unique globally and the Centre's structure supports collaborative innovation with industry to unlock the potential of digital content.

**Why join The ADAPT Centre?**

1. **Work on hard problems in an interdisciplinary and exciting research environment.** The ADAPT Centre combines expertise of researchers at Trinity College Dublin, Dublin City University, University College Dublin, and Dublin Institute of Technology. It brings together more than 150 researchers that have collectively won more than €100M in competitive research funding and have an international track record of bridging research and innovations to more than 140 companies. With €50M in research funding from SFI and industry, ADAPT research and technologies will help businesses in all sectors to manage, personalise and deliver digital content more effectively.

2. **Work in a University where excellence of research is valued.** Trinity is Ireland’s premier University and is ranked in 71st position in the top 100 world universities by the QS World University Rankings 2014.

3. **Work in a centre focussed on advancing your career.** Whether you want to take an academic, industrial, or entrepreneurial career path, ADAPT prides itself in the support and mentoring that enables all its postdocs to reach their full potential. This year alone its postdoc-to-PI programme has helped three postdocs transition to be Principal Investigators on their own H2020 projects, while four other have recently won funding with ADAPT support to realise the commercialisation of their research through spin outs and licensing.

4. **As well as providing an exciting work environment with access to cutting edge research, ADAPT support flexible working hours for students and staff, and family friendly working practices.**
Funding Information

The position is funded through the Science Foundation Ireland, the ADAPT Research Centre and EU project.

Equal Opportunities Policy

Trinity College Dublin, the University of Dublin is an equal opportunities employer and is committed to the 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.

Application Procedure

Please apply via email to vacancies@adaptcentre.ie and include a;

- Targeted cover letter (600-1000 words) expressing your suitability for the position
- Complete CV

Please include the reference code: MSc_Ethics on all correspondence.

There will be an interview process, and the successful candidate will be invited to apply via the TCD graduate studies admission system.

General enquires concerning this post can be addressed to lhogan2@tcd.ie

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