Post Title: Research Masters Studentship in Privacy-Aware Voice Data Processing

Post Status/Ref: Fixed Term, 2 years Masters Studentship in Privacy-Aware Voice Data Processing

Research Group/Department/School: ADAPT Centre, School of Computing

Location: Dublin City University, Ireland

Funding: Payment of tax-free stipend of €18,500. In addition, payment of academic fees, funding for training and conference travel available.

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

Post Summary
Applications are invited for an MSc studentship in privacy-aware voice data processing at the ADAPT Centre, Dublin City University. The position is funded by Science Foundation Ireland through the ADAPT Centre. This is a 2-year fully-funded MSc position, with an MSc scholarship of euro 18,500 per year (no tax), MSc fees are paid, and financial support for training and conference travel is provided.

Research Topic
This research project will focus on privacy-aware voice data processing. A wealth of personal information is exposed by the speech signal. Gender, age and speaker origin may be determined through speech processing. Significant research has also been devoted to identifying cues in the speech signal that may reveal the presence of diseases such as Parkinson's, Alzheimer's and heart disease. The rise of public speech recognition interfaces and virtual assistants means the latter personal information risks being exposed to data controllers.

The aim of the proposed project is to develop the means to technologically enforce restrictions on the speech processing applications that may be applied to a data subject's voice data held by a data controller. This will entail development and evaluation of algorithms whose aim is to remove from/obscure in the speech signal those cues that may reveal personal information while leaving intact just that information required for the specific speech processing task at hand.
**Supervision**
This Research Masters position will be supervised by Dr. Darragh O’Brien (Dublin City University). Secondary supervisors are Prof. David Lewis (Trinity College Dublin) and Prof. Naomi Harte (Trinity College Dublin).

**Candidate skillset**
The candidate should have a degree in a relevant field of study e.g. computer engineering, electronic engineering, software engineering. Essential requirements include experience in Digital Signal Processing and programming ability. The ideal candidate will also have:
- A proactive attitude, willing to take ownership and initiative in all work assignments,
- Excellent problem solving skills,
- Strong design, development and testing skills,
- Excellent communication skills, verbal and written (English),
- Creative thinking.

**Dublin City University (DCU)**
Dublin City University (DCU) is young and vibrant university with a strong culture of scholarship and enterprise, developed through its strong, active links with academic, research and industry partners in Ireland and around the world. DCU provides a unique learning environment where students are encouraged to develop their creativity and skills as innovators. Researchers at DCU are translating their ideas and discoveries into new solutions in business, technology and society through their engagement with spin-out companies and established industrial clients.

**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 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.

3. 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 Science Foundation Ireland and the ADAPT Centre.

Equal Opportunities Policy
Dublin City University 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 DOB on all correspondence.

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

General enquires concerning this post can be addressed to darragh.obrien@dcu.ie

DUBLIN CITY UNIVERSITY IS AN EQUAL OPPORTUNITIES EMPLOYER