**Post Specification**

<table>
<thead>
<tr>
<th>Post Title:</th>
<th>PhD Studentship</th>
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</thead>
<tbody>
<tr>
<td>Post Status/Ref:</td>
<td>Fixed Term, 4 years PhD Studentship in Personalised Search of Multi-modal Content /Code: PU_IG_PhD1</td>
</tr>
<tr>
<td>Research Group/Department/School:</td>
<td>ADAPT Centre, School of Computer Science and Statistics</td>
</tr>
<tr>
<td>Location:</td>
<td>O'Reilly Institute, Trinity College Dublin, the University of Dublin, College Green, Dublin 2, Ireland</td>
</tr>
<tr>
<td>Funding:</td>
<td>Payment of tax-free stipend of €16k. In addition, payment of academic fees.</td>
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<tr>
<td>Closing Date and Time:</td>
<td>12 Noon on 14th April 2017</td>
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**Post Summary**

This research will focus on the application of state of the art approaches to image and video analysis to support the personalised search of multi-modal content. This will involve the parsing of image material for knowledge extraction and metadata generation. This metadata will be used during the personalised search and composition of video content.

This PhD will contribute to the advancement of the state-of-the-art in personalised IR in multimodal contexts, through the development of novel approaches to personalised search of video content.

The post is part of the new ADAPT Centre. ADAPT has received €50 Million research funding from Industry and Science Foundation Ireland to support 150 researchers across 4 universities in Dublin. The ADAPT Centre’s mission is to produce world class research that delivers disruptive innovations for the digital media and intelligent content industry. The PhD position will be supervised by Prof. Séamus Lawless, Prof. Gareth Jones and Dr. François Pitie.
Duties and Responsibilities

The successful candidate will work within a large group of Academics, Postdoctoral Researchers, PhD students and Software Developers. The successful candidate will research the specialist area of Information Retrieval, specifically personalised and multi-modal search. The tasks to be performed as part of this position will include:

- Applying novel algorithms to the personalisation of search.
- Developing innovative approaches to personalised multi-modal search.
- Evaluating and deploying new personalised, multi-modal IR approaches in authentic scenarios.
- Contributing to journal and conference publications.
- Contributing to short term, focused projects with ADAPT Industry Partners.

Background on the ADAPT Centre

We live in a world of global digital connectivity where individuals, communities and businesses are communicating globally at incredible speed, in enormous volumes, across the world’s languages and over an ever-increasing range of devices.

ADAPT’s vision is to leverage this torrent of digital content to enable unprecedented levels of global engagement among people, companies and communities. This is achieved through a unique collaboration between world-class research groups in multilingual natural language processing (NLP), multimedia content analysis and transformation, personalisation and multimodal interaction.

Within ADAPT and its affiliated group of international and commercialisation projects, this post will deliver the advances in Personalised Information Retrieval technologies that are key to efficiently access the content and knowledge that underpins intelligent global customer engagement.

Why join ADAPT@ TCD
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 new 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 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.

**Funding Information**

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

**Person Specification**

**Qualifications**
The successful candidate will have a Primary degree in Computer Science or Computer Engineering with a minimum of II.I grade or equivalent.

**Knowledge & Experience (Essential & Desirable)**

- Experience in Information Retrieval, Multi-Modal Content Processing and/or Personalisation is a distinct advantage

**Skills & Competencies**

The successful candidate:

- Must display a keen interest in Information Retrieval, Personalisation and Multi-Modal Content Processing.
- Strong programming and technical experience is a distinct advantage.
- Will be highly motivated, with strong written and oral communication skills and a demonstrated proficiency in software development, with strong design and programming skills.
- Must be eager to work in and learn from multi-disciplinary and multi-organisation teams.
- Should have English language certification if English is not their first language, the requirement being: IELTS: 7.0+, TOEFL iBT: 100+, TOEFL pBT: 600+, CEF: C1+, or equivalent.

**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.

Trinity accounts for one-fifth of all spin-out companies from Irish higher education institutions, helping to turn Ireland into an innovation-intensive, high-productivity economy. That culture of innovation and entrepreneurship is a defining characteristic of our campus as we help shape the next generation of job creators. Trinity has developed significant strength in a broad range of research areas, including the 19 broadly based multi-disciplinary thematic research areas.
Ireland’s first purpose-built nanoscience research institute, CRANN, houses 150 scientists, technicians and graduate students in specialised laboratory facilities. Meanwhile, the state-of-the-art Biomedical Sciences Institute is carrying out breakthrough research in areas such as immunology, cancer and medical devices.

The Old Library, which houses the Long Room, in Trinity is the largest research library in Ireland, with a collection of six million printed items, 500,000 maps, 80,000 electronic journals, and 350,000 electronic books. Some of the world’s most famous scholars are graduates of Trinity, including writer Jonathan Swift, dramatist Oscar Wilde, philosopher George Berkeley, and political philosopher, and political theorist Edmund Burke. Three Trinity graduates have become Presidents of Ireland - Douglas Hyde, Mary Robinson and Mary McAleese.

Trinity is the highest ranked university in Ireland, and among the world’s leading higher education institutions.

**Trinity College Dublin World University Rankings**

**Overall**

- Trinity is Ireland’s No.1 University in the QS World University Ranking, THE World University Ranking and the Academic Ranking of World Universities (Shanghai).
- Trinity is ranked 71st in the World and 21st in Europe in the 2013/2014 QS World University Ranking across all indicators.

**Internationalisation**

- Trinity is ranked 44th in the World in the Times Higher Education Top 100 Most International Universities.
- Trinity is 46th in the World in the QS World University Ranking 2013/2014 in terms of International Faculty.

**Research Performance**
• Trinity is ranked in the top 70 universities in the world in the Times Higher Education Ranking of World Universities in terms of overall research and in the top 75 universities in the world in terms of citations (research impact).

• Trinity ranks in the top 1% of research institutions in the world in the following 17 Essential Science Indicators fields (an increase of over 150% from 2004): Physics, Chemistry, Engineering, Social Sciences (General), Immunology, Neurosciences, Nanosciences, Materials Science, Pharmacy and Toxicology, Molecular Biology and Genetics, Biology and Biochemistry, Microbiology, Plant and Animal Science, Clinical Medicine, Agriculture, Psychiatry/Psychology, Environment/Ecology.

In the QS Faculty Rankings 2015*:

• Trinity is ranked 63rd in the world in Arts and Humanities.
• Trinity is ranked 69th in the world in Life Sciences and Medicine.
• Trinity is ranked 89th in the in Social Sciences and Management.

In the QS Subject Rankings 2015**:

Trinity College Dublin features in the world’s elite (Top 200) institutions in 25 of the 28 subjects in which it was evaluated by the QS World University Rankings by Subject 2015. Of these, Trinity ranks in the top 100 in the world in 14 subjects and in the top 5 in the world in 5 subjects.

Top 50

• Trinity is ranked 32nd in the world in English Language and Literature.
• Trinity is ranked 33rd in the world in Politics and International Studies.
• Trinity is ranked 39th in the world in History.
• Trinity is ranked 48th in the world in Biological Sciences.
• Trinity is ranked 49th in the world in Modern Languages.

Top 100
• Trinity is in the top 100 in the world in Chemistry.
• Trinity is in the top 100 in the world in Computer Science and Information Systems.
• Trinity is in the top 100 in the world in Education.
• Trinity is in the top 100 in the world in Geography.
• Trinity is in the top 100 in the world in Law.
• Trinity is in the top 100 in the world in Medicine.
• Trinity is in the top 100 in the world in Pharmacy and Pharmacology.
• Trinity is in the top 100 in the world in Philosophy.
• Trinity is in the top 100 in the world in Psychology.

Trinity subjects ranked in the world top 101-200 (QS Subject Ranking 2015)

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<thead>
<tr>
<th>Subject</th>
<th>Trinity Rank</th>
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<tbody>
<tr>
<td>Accounting and Finance</td>
<td>101-150</td>
</tr>
<tr>
<td>Business and Management Studies</td>
<td>101-150</td>
</tr>
<tr>
<td>Economics and Econometrics</td>
<td>101-150</td>
</tr>
<tr>
<td>Linguistics</td>
<td>101-150</td>
</tr>
<tr>
<td>Physics and Astronomy</td>
<td>101-150</td>
</tr>
<tr>
<td>Sociology</td>
<td>101-150</td>
</tr>
<tr>
<td>Engineering - Civil and Structural</td>
<td>151-200</td>
</tr>
<tr>
<td>Engineering – Electrical</td>
<td>151-200</td>
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<tr>
<td>Engineering – Mechanical</td>
<td>151-200</td>
</tr>
<tr>
<td>Environmental Sciences</td>
<td>151-200</td>
</tr>
<tr>
<td>Mathematics</td>
<td>151-200</td>
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* QS ‘Faculty’ Rankings 2015: [www.topuniversities.com/faculty-rankings](http://www.topuniversities.com/faculty-rankings)

** QS Subject Rankings 2015: [www.topuniversities.com/subject-rankings](http://www.topuniversities.com/subject-rankings)

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 a position
- Complete CV

Please include the reference code: PU_IG_PhD1 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 sinead.gorham@adaptcentre.ie

TRINITY COLLEGE DUBLIN, THE UNIVERSITY OF DUBLIN IS AN EQUAL OPPORTUNITIES EMPLOYER