



Post Specification (Comp No 033736)

Post Title:	Research Fellow - Computer Vision and Image Processing Applications.
Post Status:	Specific Purpose Contract – Full-time
Research Group / Department / School:	ADAPT, School of Computer Science and Statistics, Trinity College Dublin, the University of Dublin
Location:	Graphics Vision Visualisation group (GV2) Stack B, CHQ Trinity College Dublin, the University of Dublin.
Reports to:	Principal Investigator: Dr. Rozenn Dahyot
Salary:	Appointment will be made on the SFI Post-Doctoral Researcher Level 2 Scale at a point in line with Government Pay Policy [€37,222 to € €48,205] per annum], appointment will be made no higher than point [4 Experienced Post Doctoral Researcher Level 2B]
Hours of Work:	40
Closing Date:	12 Noon (Irish Standard Time), 29th March 2019

Post Summary

The ADAPT Centre, the centre for digital content technology, seeks to appoint a Postdoctoral Research Fellow to conduct research in the area of computer vision and image processing in our Industry facing research team 'Spokes'. We require a highly motivated researcher to join the team in Trinity College Dublin in the school of Computer Science and Statistics to work in collaboration with industry in an exciting programme of applied research. The candidate should have a mature personal research plan in at least one of the relevant following areas: object detection, recognition and segmentation in image data .

Standard Duties and Responsibilities of the Post

Reporting to his/her Principal Investigator the Researcher will:

- Conduct a specified programme of research under the supervision and direction of the Principal Investigator (PI);
- Support the PI and research group in the design, development and implementation of the research programme;
- Research solutions to problems in a number of areas of interest, including:
 - Machine and deep learning
 - 3D point cloud and image processing
 - Pattern detection, recognition and geolocation;
- Contribute to the identification of external funding sources and assist in the writing of grant proposals;
- Mentor, assist and supervise postgraduate research students as required;
- Assist the PI in the management / co-ordination of key aspects of the research programme (e.g. financial management, reporting, equipment management etc.);
- Engage in the dissemination of the results of the research in which he/she is engaged to the wider research community with the support and under the supervision of the Principal Investigator;
- Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University;

- Engage with internal and external stakeholders including academic and industry partners/collaborators as appropriate;
- Carry out administrative work associated with the programme as necessary;
- Participate in ADAPT Centre activities, such as industry showcases and annual reviews;
- Report on progress at meetings and in writing to ADAPT Centre Management;

Produce top-quality journal and conference publications, in collaboration with the Principal Investigator (PI)

Funding Information

The position is funded through the Science Foundation Ireland & the ADAPT Centre.

Informal enquiries about this post should be made to by e-mail to: Ms Monica Lechea (monica.lechea@adaptcentre.ie)

Person Specification

Qualifications

Candidates must have a PhD in computer science, statistics or related fields with 4 to 10 years research experience (including PhD studies).

Knowledge & Experience (Essential & Desirable)

- Research experience in machine and deep learning for image processing and computer vision or similar areas including 3D point cloud, pattern detection, recognition and geo-location **(Essential)**
- Publications in the top conferences (e.g. ICML, CVPR, ICCV) and/or journals (e.g. IEEE Trans. Image Processing, Pattern Analysis and Machine Intelligence, International Journal on Computer Vision) **(Essential)**
- Excellent programming skills (e.g. C++, python) with experience using deep learning libraries (e.g. caffe, torch, theano etc.) **(Essential)**
- Collaboration with Industry. **(Desirable)**
- Commercialisation of Research **(Desirable)**

Skills & Competencies

- A pro-active attitude and ability to work both independently and in collaboration with the PI research group (**Essential**)
- Excellent communication skills (**Essential**)

Further Information for Applicants

URL Link to Area	http://www.tcd.ie http://www.adaptcentre.ie http://www.gv2.scss.tcd.ie
URL Link to Human Resources	https://www.tcd.ie/hr/

ADAPT Centre

ADAPT is Ireland's global centre of excellence for digital content technology. Led by TCD, and hosted by the School of Computer Science & Statistics, it combines the expertise of researchers at four universities (Trinity College Dublin, Dublin City University, University College Dublin, and Dublin Institute of Technology) with that of its industry partners to produce ground-breaking digital content innovations. ADAPT brings together more than 120 researchers who collectively have won more than €100m in funding and have a strong track record of transferring world-leading research and innovations to more than 140 companies. With €50M in new research funding from Science Foundation Ireland and industry, ADAPT is seeking talented individuals to join its growing team. Our research and technologies will continue to help businesses in all sectors and drive back the frontiers of future Web engagement.

GV2

The Graphics Vision and Visualisation group (GV2) <http://gv2.scss.tcd.ie> at Trinity College Dublin (TCD) is an internationally active research group dedicated to carrying out innovative research in computer graphics, computer vision and all aspects of visual computing. GV2 was formed in 2006 with the integration of two longstanding TCD research groups: the Image Synthesis Group [ISG], established in 1993, and the Computer Vision and Robotics Group [CVRG], which was established 1983. Our main areas of research include:

- Image, Video and Audio Processing & Analysis
- Perception & Graphics
- Real-time Rendering & Animation
- Custom and Multi-core Hardware Architectures
- Computer Vision & Augmented Reality

Trinity College Dublin, the University of Dublin

Trinity is Ireland's premier university, with a proud tradition of excellence stretching back to its foundation in 1592. The oldest university in Ireland, and one of the oldest in Europe, today Trinity sits at the intersection of the past and the future, and is ideally positioned as a major university in the European Union. Our 47-acre campus is located in the heart of Dublin city centre and is home to historic buildings dating from the University's establishment, as well as some of the most cutting-edge teaching and research facilities in Ireland. Students at Trinity benefit from a unique educational experience across a range of disciplines in our three faculties – Arts, Humanities, and Social Sciences; Engineering, Mathematics and Science; and Health Sciences. The pursuit of excellence through research and scholarship is at the heart of a Trinity education, and our researchers have an outstanding publication record and strong record of grant success.

Trinity has developed [18 broad-based multidisciplinary research themes](#) that cut across disciplines and facilitate world-leading research and collaboration within the University and with colleagues around the world. These internationally recognised themes include such diverse areas as Cancer, Immunology, Telecoms, Identities in Transformation, Nanoscience, Neuroscience, and Making Ireland. Researchers from across the University work together in innovative ways to develop new and exciting approaches to their research and explore the frontiers of knowledge in the 21st century. In creating these dedicated research themes, Trinity's researchers are able to become a more powerful force on the global stage, successfully competing for large-scale grants and attracting top students and faculty to the University. Trinity is home to Ireland's first purpose-built Nanoscience research institute, CRANN, which opened in January 2008. This state-of-the-art facility houses 150 scientists, technicians, and graduate students in specialised laboratories, fostering creative innovations that have seen Trinity's researchers make significant breakthroughs.

The Trinity Long Room Hub for Arts and Humanities Research Institute is the University's flagship institute for research in the Arts and Humanities, providing a world-class environment for cross-disciplinary collaborative projects. The Long Room Hub provides a central location through which the University's internationally respected Arts and Humanities research can become more visible, demonstrating its relevance for contemporary and future societies. Researchers from across the University regularly participate in debates on topical issues facing the world today. As well as operating an International Visiting Research Fellowship programme, the Long Room Hub also hosts major EU-funded Digital Humanities projects.

One of the most instantly recognised parts of Trinity's campus is the famous Old Library, home to the historic Book of Kells as well as other internationally significant holdings in manuscripts, maps, and early printed material. Trinity's Library is the largest research library in Ireland and is an invaluable resource to Trinity's students and research community. Built up over the four centuries of the University's existence, the Library's collections have benefitted from its status as a Legal Deposit library for the past 200 years, granting Trinity the right to claim a copy of every book published in Ireland and the UK. At present, the Library's holdings span approximately 4.25 million books, 22,000 printed periodical titles, and access to 60,000 e-journals and 250,000 e-books.

Trinity attracts top students from Ireland and abroad and prides itself on the consistently high standard of student admitted to the University every year. These students are drawn to Trinity for the excellence of our research-led teaching and for the quality and prestige a degree from this University confers. Trinity has also pioneered accessibility to education in Ireland, becoming the first university in the country to reserve 15% of its undergraduate places for students from non-traditional learning groups. Trinity is the top-ranked European university for student entrepreneurship and Europe's only representative in the world's top-50 universities.

Our alumni have gone on to shape the history of Ireland and of Western Europe in a wide range of fields. These include such notable figures as Jonathan Swift, Oscar Wilde, William Rowan Hamilton, Edmund Burke, William Stokes, Denis Burkitt, Louise Richardson, Lenny Abrahamson, and Anne Enright. Three of Trinity's graduates have been awarded Nobel prizes:

Ernest Walton for Physics in 1951; Samuel Beckett for Literature in 1968; and William Campbell for Physiology / Medicine in 2015. Trinity also counts the first female President of Ireland among its alumni in Mary Robinson, as well as other notable former Presidents Douglas Hyde and Mary McAleese. At Trinity we are justifiably proud of our tradition, and we strive to uphold this excellence as we face the demands of the 21st century.

Ranking Facts

Trinity is the top ranked university in Ireland. Using the QS methodology, the University is ranked 104th in the world and using the Times Higher Education World University Rankings methodology Trinity is 117th in the world.



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 104th in the World, and 36th in Europe, in the 2018/2019 QS World University Ranking.
- Trinity is ranked in the Top 120 for Graduate Employability in the QS 2018 Rankings.
- Trinity is in the Top 50 most innovative universities in Europe according to Reuters.¹
- Between 2010 and 2015, Trinity was ranked the top university in Europe for entrepreneurship according to Pitchbook's independent analysis.²

¹ <http://www.reuters.com/article/us-innovative-stories-europe-idUSKCN0Z00CT>

² <http://pitchbook.com/news/reports/2015-2016-pitchbook-universities-report>

Internationalisation

- Trinity is ranked 52nd in the world in the THE World University Ranking for international outlook.

Research Performance

- Of the 981 institutions included in the THE World University Rankings for 2017, Trinity is in the top 15% internationally for research performance.
- Trinity is ranked in the top 15% internationally by QS for citations.

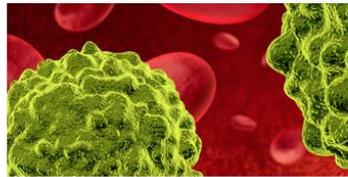
In the QS World University Subject Rankings:

- Trinity is ranked in the top 50 worldwide in four subject areas according to the QS World University Subject Rankings 2018. The University is ranked in the top 100 globally for 20 subjects overall.
- Trinity's Top 50 subjects include Nursing (25th), Classics (28th), English (28th) and Politics (43rd).
- Trinity is ranked in the top 100 for each of the following 16 subjects: History, Languages, Philosophy, Theology, Computer Science, Biology, Medicine, Pharmacy, Chemistry, Geography, Materials Science, Education, Law, Social Policy, Sociology and Sport.
- The University is ranked in the top 100 for three broad subject areas: Arts & Humanities (57th), Life Sciences & Medicine (87th), and Engineering & Technology (89th).

Research Themes



Ageing



Cancer



Creative Arts Practice



Creative Technologies



Digital Engagement



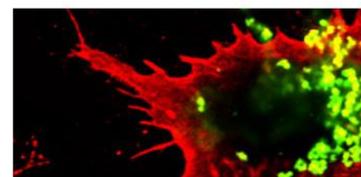
Digital Humanities



Genes & Society



Identities in Transformation



Immunology, Inflammation & Infection



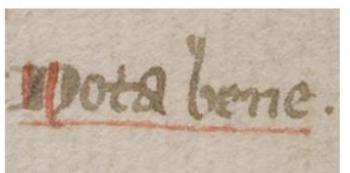
International Development



International Integration



Making Ireland



Manuscript, Book and Print Cultures



Nanoscience



Neuroscience



Telecommunications



Smart Sustainable Planet



Next Generation Medical Devices

The Selection Process in Trinity

The Selection Committee (Interview Panel) may include members of the Academic and Administrative community together with External Assessor(s) who are expert in the area. Applications will be acknowledged by email. If you do not receive confirmation of receipt within 1 day of submitting your application online, please contact the named Recruitment Partner on the job specification immediately and prior to the closing date/time.

Given the degree of co-ordination and planning to have a Selection Committee available on the specified date, the University regrets that it may not be in a position to offer alternate selection dates. Where candidates are unavailable, reserves may be drawn from a shortlist. Outcomes of interviews are notified in writing to candidates and are issued no later than 5 working days following the selection day.

In some instances the Selection Committee may avail of telephone or video conferencing. The University's selection methods may consist of any or all of the following: Interviews, Presentations, Psychometric Testing, References and Situational Exercises.

It is the policy of the University to conduct pre-employment medical screening/full pre-employment medicals. Information supplied by candidates in their application (Cover Letter and CV) will be used to shortlist for interview.

Applications from non-EEA citizens are welcomed. However, eligibility is determined by the Department of Jobs, Enterprise and Innovation and further information on the Highly Skills Eligible Occupations List is set out in Schedule 3 of the Regulations <https://www.djei.ie/en/What-We-Do/Jobs-Workplace-and-Skills/Employment-Permits/Employment-Permit-Eligibility/Highly-Skilled-Eligible-Occupations-List/> and the Ineligible Categories of Employment are set out in Schedule 4 of the Regulations <https://www.djei.ie/en/What-We-Do/Jobs-Workplace-and-Skills/Employment-Permits/Employment-Permit-Eligibility/Ineligible-Categories-of-Employment/>. Non-EEA candidates should note that the onus is on them to secure a visa to travel to Ireland prior to interview. Non-EEA candidates should also be aware that even if successful at interview, an appointment to the post is contingent on the securing of an employment permit.

Equal Opportunities Policy

Trinity is an equal opportunities employer and is committed to 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. On that basis we encourage and welcome talented people from all backgrounds to join our staff community. Trinity's Diversity Statement can be viewed in full at <https://www.tcd.ie/diversity-inclusion/diversity-statement>.

Pension Entitlements

This is a pensionable position and the provisions of the Public Service Superannuation (Miscellaneous Provisions) Act 2004 will apply in relation to retirement age for pension purposes. Details of the relevant Pension Scheme will be provided to the successful applicant.

Applicants should note that they will be required to complete a Pre-Employment Declaration to confirm whether or not they have previously availed of an Irish Public Service Scheme of incentivised early retirement or enhanced redundancy payment. Applicants will also be required to declare any entitlements to a Public Service pension benefit (in payment or preserved) from any other Irish Public Service employment.

Applicants formerly employed by the Irish Public Service that may previously have availed of an Irish Public Service Scheme of Incentivised early retirement or enhanced redundancy payment should ensure that they are not precluded from re-engagement in the Irish Public Service under the terms of such Schemes. Such queries should be directed to an applicant's former Irish Public Service Employer in the first instance.

Application Procedure

Application Procedure

Candidates should submit a cover letter together with a full curriculum vitae to include the names and contact details of 3 referees (email addresses if possible) to:

Name: Monica Lechea

Email Address: monica.lechea@adaptcentre.ie

Please include reference to RF Computer Vision and Image Processing Applications in the subject line



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universityvacancies.com

