



Post Specification

Post Title:	Research Assistant
Post Status:	Specific Purpose Contract (part-time)
Research Group / Department / School:	School of Computer Science and Statistics, Trinity College Dublin, the University of Dublin
Location:	School of Computer Science and Statistics, Trinity College Dublin, the University of Dublin College Green, Dublin 2, Ireland
Reports to:	Dr. Mimi Zhang
Salary:	Appointment will be made on the Research Assistant Point 1 level, with salary from €34130 to €34966 per annum (pro-rata and exclusive of employer costs). Appointment will be made no higher than point Research Assistant Point 2
Hours of Work:	8 hours per week
Closing Date:	12 Noon (GMT), 20 April 2026

Post Summary

The Research Assistant will work with Dr. Zhang on the collection, curation, processing, and analysis of fMRI and MEG data obtained from open-access neuroimaging repositories. The role will focus on identifying suitable datasets for the study of mental disorders, implementing and comparing different preprocessing pipelines, and applying advanced functional data analysis methods developed within the team to both resting-state and task-based neuroimaging data. The Research Assistant will also collaborate closely with other team members to test, validate, document, and improve the usability of the team's Python-based

functional data analysis tools, and to support the dissemination of research findings through reports, presentations, and academic publications.

Standard Duties and Responsibilities of the Post

The successful candidate will be expected to:

- Conduct literature reviews to identify major mental and neurological disorders that may benefit from the analysis of fMRI and MEG data and help refine research questions in line with the team's objectives.
- Identify, assess, and collect suitable resting-state and task-based neuroimaging datasets from open data repositories, ensuring appropriate data governance, organisation, and documentation.
- Preprocess fMRI and MEG datasets using robust and reproducible workflows, including the implementation and comparison of different preprocessing pipelines.
- Benchmark alternative preprocessing strategies and evaluate their impact on downstream analyses, with particular attention to data quality, robustness, reproducibility, and interpretability.
- Apply functional data analysis methods and other statistical or computational tools developed by the team to processed neuroimaging data.
- Assist in testing, validating, and refining new analytical methods on real-world datasets, and contribute to methodological development where appropriate.
- Improve the documentation, usability, and functionality of the team's Python package for functional data analysis, including code testing, troubleshooting, version control, and user guidance.
- Contribute to the maintenance of clear, reproducible computational workflows, including data management, code organisation, and research records.
- Work collaboratively with other members of the research team, including participating in regular meetings, presenting progress updates, and contributing to joint problem-solving.
- Summarise research findings in technical reports, internal documentation, conference presentations, and academic manuscripts for publication in peer-reviewed journals.

- Support the preparation of project outputs, including figures, tables, supplementary materials, and research presentations.
- Undertake any other research-related duties appropriate to the grade of the post as assigned by Dr. Zhang or the project team.

Funding Information

Enterprise Ireland

Person Specification

Qualifications

Applicants must hold, or expect to hold by the start date, a minimum of a Second Class Honours Grade 1 (2.1) undergraduate degree, or equivalent, and a Master's degree with Distinction, or equivalent. Candidates without a Master's degree, or with qualifications below this level, will not be considered.

Knowledge & Experience (Essential & Desirable)

Applicants must demonstrate a strong academic background in mathematics, statistics, computer science, or a closely related discipline.

Experience in data analysis, scientific computing, or neuroimaging-related research would be an advantage.

Candidates must currently reside in Ireland, as the post is expected to commence on 1 June 2026.

Skills & Competencies

- Strong mathematical and/or statistical skills.
- Strong programming skills in Python.
- Excellent written and spoken English communication skills.

Application Procedure

Please submit the following files to mimi.zhang@tcd.ie with the subject "Research Assistant position on machine learning and functional neural imaging". Shortlisted candidates will be notified in the week 27th April and invited for an interview in the week of 4th May.

1. Cover letter
2. CV
3. Undergraduate and postgraduate transcripts
4. Proof of English language qualifications, if required
5. 2 academic referee names

Further Information for Applicants

URL Link to Area	www.tcd.ie
URL Link to Human Resources	https://www.tcd.ie/hr/

Trinity College Dublin, the University of Dublin

Trinity is Ireland's leading university and is ranked 87 in the World by the QS World University Ranking 2025. Founded in 1592, the University is steeped in history with a reputation for excellence in education, research and innovation.

Located on an iconic campus in the heart of Dublin's city centre, Trinity has 18,000 undergraduate and postgraduate students across our three faculties – Arts, Humanities, and Social Sciences; Engineering, Mathematics and Science; and Health Sciences.

Trinity is ranked as the Trinity is the 31st most international university in the world - Times Higher Education 2024 and has students and staff from over 120 countries.

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 19 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. Trinity is also home to 5 leading flagship research institutes:

- Trinity Biomedical Sciences Institute (TBSI)
- Trinity College Institute of Neuroscience (TCIN)
- Trinity Translational Medical Institute (TTMI)
- Trinity Long Room Hub Arts and Humanities Research Institute (TLRH)
- Centre for Research on Adaptive Nanostructures and Nanodevices (CRANN)

Trinity is the top-ranked European university for producing entrepreneurs for the past five successive years and Europe's only representative in the world's top-50 universities (Pitchbook Universities Report).

Trinity is home to the famous Old Library and to the historic Book of Kells as well as other internationally significant holdings in manuscripts, maps and early printed material. The Trinity Library is a legal deposit library, granting the University the right to claim a copy of every book published in Ireland and the UK. At present, the Library's holdings span approximately 6.5 million printed items, 400,000 e-books and 150,000 e-journals.

With over 120,000 alumni, Trinity's tradition of independent intellectual inquiry has produced some of the world's finest, most original minds including the writers Oscar Wilde and Samuel Beckett (Nobel laureates), the mathematician William Rowan Hamilton and the physicist Ernest Walton (Nobel laureate), the political thinker Edmund Burke, and the former President of Ireland Mary Robinson. This tradition finds expression today in a campus culture of scholarship, innovation, creativity, entrepreneurship and dedication to societal reform.

Rankings

Trinity College Dublin is the top ranked university in Ireland.

- Trinity College Dublin is Ireland's No.1 University - QS World University Ranking 2025; Times

Higher Education World University Rankings 2024

- Trinity is ranked 87 in the World by the QS World University Ranking 2025
- Trinity is ranked 139 in the World by the Times Higher Education World University Rankings 2025

Full details are available at: www.tcd.ie/research/about/rankings.

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 Business, Enterprise and Innovation and further information on the Highly Skills Eligible Occupations List is set out in Schedule 3 of the Regulations

<https://dbei.gov.ie/en/What-We-Do/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://dbei.gov.ie/en/What-We-Do/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

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Applicants should submit all required files to: Mimi Zhang (mimi.zhang@tcd.ie)



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VACANCIES IRELAND**
universityvacancies.com

