

Research Associate—GLOSSAM project College of Arts, Social Sciences & Celtic Studies School of Languages, Literatures and Cultures Ref. No. 010478

JOB ADVERTISEMENT

Applications are invited from suitably qualified candidates for a full-time, fixed term position as a Research Associate with discipline of <u>Classics</u> at the University of Galway, Ireland.

The University is committed to embracing opportunities for hybrid working, to build a more dynamic, agile and responsive University, while sustaining strong standards of teaching, learning, research and high levels of productivity. The University will continue to be the primary workplace for all staff, however individual hybrid arrangement requests can be reviewed with the Line Manager in conjunction with the University Hybrid Working Policy.

This position is funded by Irish Research Council and is available from 1st September 2024 to contract end date of 31st August 2025.

The GLOSSAM project:

Global and Local Scholarship on Annotated Manuscripts (GLOSSAM) is a four-year research project (2022–2026) based in the College of Arts, Social Sciences & Celtic Studies at the University of Galway, directed by Dr Pádraic Moran. See: http://www.glossam.ie/

GLOSSAM will enhance our understanding of reading, education, scholarship, and knowledge transfer in the pre-modern world, by creating new narratives, conceptual frameworks, digital tools and methodological models for the study of glosses.

Glosses are the paratexts transmitted between the lines and in the margins of manuscript books, micro-texts that control how the central texts were read and interpreted. Glosses are as ubiquitous as books themselves. Recent research has discovered that they are a truly global phenomenon, found throughout the literate cultures of Europe, the Middle East, and South and East Asia. The potential now exists to create a new narrative for the history of glossing in an expanded global context.

Research environment:

This post will be located in the Hardiman Research Building at the University of Galway. The researcher will work with the other members of the research team and will benefit from dedicated training, mentorship and networking activities. The research team comprises the Principal Investigator (PI), one Humanities postdoctoral researcher, one Data Science research associate (this role) and one Humanities PhD researcher.



The candidate can become a member of the University's <u>Data Science Institute</u> and will be able to participate in seminars and other research events there. The researcher will also participate in Digital Humanities seminars and events in the College of Arts, and join a network of Data Science and Digital Humanities researchers engaged in a variety of projects there. See https://mooreinstitute.ie/research-group/digital-humanities/.

Salary: Research Associate/Postdoctoral Researcher salary scale €42,782 - €54,965 per annum, (subject to the project's funding limitations), and pro rata for shorter and/or part-time contracts.

The default position for all new public sector appointments is the 1st point of the salary scale. This may be reviewed, and consideration afforded to appointment at a higher point on the payscale (subject to the project's funding limitations), where evidence of prior years' equivalent experience is accepted in determining placement on the scale above point 1, subject to the maximum of the scale.

(Research Salary Scales - University of Galway)

Closing date for receipt of applications is 17:00 (Irish Time) on 5 August 2024. It will not be possible to consider applications received after the closing date.

Please review full job description for further details and essential requirement

JOB DESCRIPTION

The successful candidate will explore the application of Data Science methods, in particular Natural Language Processing and Deep Learning, to the analysis of historical texts.

Glosses are short texts that provide a running commentary on other (primary) texts, and are usually found written between the lines or in the margins of medieval manuscripts (handwritten books).

This project focuses on manuscripts from the eighth and ninth centuries AD, where the primary texts are usually in Latin, and glosses are written in Latin, Old Irish and other historical languages. The corpus of texts for this project may be found in Gloss Corpus (http://www.glossing.org/glosscorpus), currently containing around 32,000 glosses and still expanding.

Glosses are often not unique, and different manuscripts containing the same primary texts often contain glosses in the same locations with the same or similar wording. However, this material presents serious challenges for Humanities researchers, since 1) a manuscript may contain potentially thousands of glosses, making traditional analysis extremely slow and complex; 2) the textual relationships between different glossed manuscripts are often very complex and not easy to summarise.

The researcher will explore cutting-edge Data Science methods to address these challenges. They will be supported by the project team, who will supply textual content and advise on its interpretation. The researcher will develop new techniques for interpreting historical cultural texts, including texts in underresourced languages (Old Irish in particular).



Duties:

- Producing statistical analyses for texts in Gloss Corpus (e.g. metrics and frequency distributions),
 with suitable visualisations where appropriate.
- Application of semantic word embeddings for Latin (and potentially multilingual, including Old Irish) texts. Assisting with the development of associated web applications (e.g. semantic search, text similarity search).
- Application of sentence or document embeddings to entire glosses. Analysis of semantic overlap
 across different collections of glosses, using text clustering analysis or similar, and visualisations
 where appropriate.
- Assisting with the development of the Gloss Corpus web resource.
- Regular collaboration with the project team, contributing ideas and helping to solve data-related project challenges.
- Presenting the results of research at seminars and conferences.
- Publishing the results of research in quality peer-reviewed journals for Data Science and/or Digital Humanities research.
- Any other duties assigned commensurate to this level of post.

ELIGIBILITY REQUIREMENTS

Essential Requirements:

- Primary degree in Data Science, Computer Science or a closely related field, and at least four years' full-time relevant research experience after primary degree.
- Evidence of advanced skills in Python, databases and data visualisation.
- Evidence of advanced skills in NLP tasks including word and sentence embeddings, transformers, multilingual models, transfer learning, text clustering.
- Excellent organisation, communication and interpersonal skills, with full working proficiency in the English language.

Desirable Requirements:

- Experience with NLP tasks for historical and/or under-resourced languages.
- Experience in web application development, preferably using Python web application frameworks such as Django or Flask.
- Previous peer-reviewed publications.



• Experience working on collaborative, multidisciplinary research projects.

CONTINUING PROFESSIONAL DEVELOPMENT

Continuing Professional Development/Training:

Researchers at University of Galway are encouraged to avail of a range of training and development opportunities designed to support their personal career development plans. University of Galway provides continuing professional development supports for all researchers seeking to build their own career pathways either within or beyond academia. Researchers are encouraged to engage with our Researcher Development Centre (RDC) upon commencing employment—see HERE for further information.

Further Information/Links

- To apply: Jobs University of Galway. Applications must be submitted online.
 - How to apply guide
- For informal enquiries, please contact Dr Pádraic Moran, Lecturer in Classics, School of Languages, Literatures and Cultures (padraic.moran@universityofgalway.ie).
- University's Strategic Plan
- Working in Research at University of Galway
- Moving to Ireland (Euraxess)
- Applicant Information
- We reserve the right to re-advertise or extend the closing date for this post.
- University of Galway is an equal opportunities employer.
- All positions are recruited in line with Open, Transparent, Merit (OTM) and Competency based recruitment.



