

OLLSCOIL NA GAILLIMHE UNIVERSITY OF GALWAY



Postdoctoral Researcher/Research Associate Schools of Engineering and of Computer Science, and Data Science Institute, Insight Centre

Ref. No. 011182

JOB ADVERTISEMENT

Applications are invited from suitably qualified candidates for a full-time, fixed-term position as a Postdoctoral Researcher with the Insight Centre, located within the Data Science Institute at the University of Galway, Ireland.

This position is funded by Research Ireland and Ward & Burke Construction Ltd and is available from earliest possible commencement date for a period of 12 months.

- The Insight SFI Research Centre for Data Analytics is one of the largest data analytics centres in Europe. See <u>https://www.insight-centre.org/</u>.
- At the Data Science Institute (DSI), we research technologies at the convergence of Computer Science, Web Science and Artificial Intelligence to build a fundamental understanding of how information and knowledge are increasingly driving society through digital processes, and of the tools, techniques and principles supporting a data-enhanced world. See <u>https://www.universityofgalway.ie/dsi</u>.
- The School of Computer Science was initially established in 1991 as the Information Technology Discipline, and became a School in 2019, recognising its growth and significance. Our staff currently include 34 academic faculty, 6 support staff and over 50 research staff. In the Times Higher Education world university rankings by subject, Computer Science at University of Galway is ranked first/second in Ireland. See <u>https://www.universityofgalway.ie/science-engineering/school-of-computer-science</u>
- At the School of Engineering, our School members are research pioneers, advancing knowledge and creating solutions that have a positive impact on society. We consistently contribute ground-breaking solutions to real-world problems. See https://www.universityofgalway.ie/science-engineering/engineering/civil-engineering/



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Salary: Postdoctoral Research salary scale €45,846 - €58,481 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 14 July 2025. It will not be possible to consider applications received after the closing date.

Interviews are planned to be held mid-July 2025.

*Please review full job description for further details and essential requirement

JOB DESCRIPTION

Job Description:

The successful candidate will be part of a project team with substantial expertise and ongoing research in this area: 2 PIs, 2 Research Assistants, and 2 PhD students in the University of Galway, and collaborators in Ward & Burke Construction Ltd and in University of Cambridge, UK.

The research programme will be in Machine Learning (ML) for Wastewater Treatment Plant (WWTP) Operation. Ward & Burke Ltd. operate a number of large-scale WWTPs in Ireland and elsewhere. A WWTP uses multiple treatment processes in order to meet environmental standards. **The overall goal of the overall project** is to operate plants more efficiently, using less electricity, reducing emissions of all types from the processing, while meeting strict regulatory standards on outflow water.

Duties: What the successful candidate will do attached to the specific post:

- Review existing research;
- Lead and contribute to regular meetings and discussion with the project team (in-person and online meetings; via email and other online channels);
- Contribute to decisions on project direction;
- Lead development of machine learning, simulation and optimisation models;
- Lead publications in international conferences and journals;
- Contribute to development and delivery of continuous professional development classes for Ward & Burke Construction Ltd.;
- Engage in wider research and scholarly activities of the research group, including journal clubs, reviewing, mentoring junior researchers;
- Engage in training and professional development appropriate to the candidate's level and background, such as research ethics training, technical training;
- Any other duties assigned commensurate to this level of post.

ELIGIBILITY REQUIREMENTS



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Essential Requirements:

- PhD degree in Computer Science, Data Science, Civil Engineering, or cognate discipline (candidates who have submitted their PhD thesis and are awaiting viva at the time of shortlisting can be considered)
- Close alignment with project topic;
- Expertise in Python, statistics, and time-series data;
- Excellent research writing skills, reflected in high-quality first-author publications.

Desirable Requirements:

- Excellent oral communication;
- Experience in research project management;
- Demonstrated commitment to sustainability;
- Attention to detail and professional attitude in dealing with co-workers, supervisors, and industry collaborators.

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 <u>HERE</u> for further information.

Further Information/Links

- **To apply**: <u>Search Current University of Galway vacancies</u>. Applications must be submitted online.
 - How to apply guide
- For informal enquiries, please contact Dr James McDermott, Senior Lecturer, School of Computer Science, Email james.mcdermott@universityofgalway.ie.
- <u>University's Strategic Plan</u>
- Working in Research at University of Galway
- Moving to Ireland (Euraxess)
- <u>Applicant Information</u>



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- 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.

