**Job Description: Research Assistant**

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| **Faculty:** | ***FSE*** |
| **Department/Subject:** | ***Civil Engineering*** |
| **Salary:** | *Grade 7: £33,882 to £37,999 per annum (Pro Rata)* |
| **Hours of work:** | ***75% FTE*** |
| **Number of positions:** | ***1*** |
| **Contract:** | **This is a fixed-term, part-time Research Assistant position for 26 months at 75% FTE, ending on 30th June 2027, reporting to Professor Harshinie Karunarathna. This post is funded by Prof. Harshinie Karunarathna’s research grant from the Leverhulme Trust.** |
| **Location:** | **This position will be based at the Bay Campus** |

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| **Main Duties** | 1. Conduct research under the supervision of Professor Harshinie Karunarathna, focusing primarily on Artificial Intelligence assisted nature-based approaches to flood and coastal erosion risk management assisted by coastal wetlands. 2. Organise project progress meetings and liaise with other researchers linked to this project. 3. Assist Professor Harshinie Karunarathna and her team in R&D activities, including capacity building and collaboration with stakeholders. 4. Contribute to dissemination and innovation efforts led by Professor Harshinie Karunarathna and her team, including outreach activities. |
|  | 1. Pro-actively design and conduct research, including gather, prepare and analyse data, generate original ideas and present results. 2. Prepare and publish reports and papers describing the results of the research. 3. Be self-motivated, apply and use their initiative, aiming to determine suitable ways to tackle challenges and seeking guidance when needed. 4. Interact positively and professionally with other collaborators and partners within the Faculty and elsewhere in the University and beyond as appropriate. 5. Contribute to Faculty organisational matters in order to help it run smoothly and to help raise its external research profile. 6. Keep informed of developments in the field in technical, specific and general terms and their wider implication for the discipline area, commercial applications and the knowledge economy. 7. When requested act as a representative or member of committees, using the opportunity to extend their own professional experience. 8. Demonstrate and evidence own professional development, identifying development needs with reference to the Vitae Researcher Development Framework, particularly with regard to probation, PDR and participation in training events. 9. Maintain and enhance links with the professional institutions and other related bodies. 10. Observe best-practice protocols in maintenance and retention of research records as indicated by HEI and Research Councils records management guidance.  This includes ensuring project log-book records are deposited with the University/Principal Investigator on completion of the work. |
| **General Duties** | 1. To promote equality and diversity in working practices and maintain positive working relationships. 2. To conduct the job role and all activities in accordance with safety, health and sustainability policies and management systems, in order to reduce risks and impacts arising from the work activity. 3. To ensure that risk management is an integral part of any decision making process, by ensuring compliance with the University’s Risk Management Policy. 4. Any other duties as agreed by the Faculty / Directorate / Service Area. |
| **Person Specification** | **Essential criteria:**   1. Either have a PhD degree or close to complete a PhD degree in the research area of hydrodynamics and sediment transport on coastal wetlands. 2. Research experience in eco-hydraulics of the coastal environment, process-based computational modelling of coastal hydro-morphodynamics using XBeach, development and application of data-driven models including Gaussian Process modelling and other relevant Machine Learning techniques to eco-hydraulics, laser-based experimental techniques on sediment transport processes in coastal wetlands, assimilation of field and experimental data on sediment transport, and sediment transport process dynamics in UK saltmarshes. The candidate should also have a good awareness of taking in-situ hydrodynamic and sediment transport measurements in UK salt marshes and be able to demonstrate that they can work outside traditional disciplinary boundaries. 3. Be able to develop models using Python programming language. 4. Evidence of the ability to actively engage in and contribute to writing and publishing research papers, particularly for refereed journals and conferences. 5. A demonstrable ability to conduct research in line with the objectives of the project. 6. Evidence of planning skills to contribute to the research project.     **Desirable Criteria**   1. Ability to work in a team of academic researchers. 2. Excellent interpersonal and communication skills |
| **Welsh Language Level** | Level 1 – ‘a little’ - pronounce Welsh words. Able to answer the phone in Welsh (good morning / afternoon). Able to use very basic every-day words and phrases (thank you, please etc.). Level 1 can be reached by completing a one-hour training course.  For more information about the Welsh Language Levels please refer to the Welsh Language Skills Assessment web page, which is available [here](https://www.swansea.ac.uk/welsh-language-standards/compliance/recruitment/). |
| **Additional Information** | Informal enquiries: Interpretation of the job description is at the exclusive discretion of Professor Harshinie Karunarathna. Any questions please contact Professor Harshinie Karunarathna directly at [H.U.Karunarathna@swansea.ac.uk](mailto:H.U.Karunarathna@swansea.ac.uk) |

  