

Job Description: Research Assistant

Faculty:	Medicine, Health and Life Sciences
Department/Subject:	Data Science
Salary:	Grade 7: £33,882 to £37,999 per annum together with USS pension benefits
Hours of work:	35 hours a week (100% FTE)
Number of positions:	1
Contract:	This is a fixed term position to November 2027
Location:	This position will be based at the Singleton Campus

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	Successful candidates will be working on various projects within the Population, Psychiatry, Suicide and
	Informatics team (PPSI) portfolio. The team is led by Prof. Ann John, co-director of <u>DATAMIND</u> , which has
	been successful in securing funding for a further 5 years (up to 2029) to continue to work towards its long-
	term vision to transform mental health research across the four nations. She also leads the Data Science theme in the Wolfson centre for Young People's Mental Health, focussing on reducing anxiety and
	depression in young people.
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	Main duties include:
	1. To contribute on the delivery of the mapping of the UK mental health data landscape.
	2. To create mental health phenotypes based on clinical code systems such as SNOMED CT,
	leveraging data-driven techniques.
Main Duties	3. Conduct surveys to enhance platforms supporting mental health research.
	4. Collaborate with others to answer mental health research questions, analysing very large
	databases with a combination of epidemiological and machine learning methods.
	5. To undertake highly complex and structured data analyses using a combination of
	epidemiological and machine learning techniques, dealing appropriately with potentially
	duplicated records, missing and erroneous data, and documenting the methodology.
	6. To write reports and papers on the above research questions and analyses and present findings at
	conferences.
	7. Participate actively in project meetings and contribute to discussions on mental health data
	science advancements.
	8. Any other duties as directed by the Principal Investigator, or their nominated representative expected within the grade definition.
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	11. Pro-actively contribute to and conduct research, including gather, prepare and analyse data,
	generate original ideas and present results. 12. Prepare reports, draft patents and papers describing the results of the research, both confidential
	and for publication.
	13. Be self-motivated, apply and use their initiative, aiming to determine suitable ways to tackle
	challenges and seeking guidance when needed.
	14. Interact positively and professionally with other collaborators and partners within the Faculty and
	elsewhere in the University and beyond as appropriate such as in industry/commerce, public organisations, hospitals and academia.
	15. Contribute to Faculty organisational matters in order to help it run smoothly and to help raise its
	external research profile.
	16. Keep informed of developments in the field in technical, specific and general terms and their wider
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implication for the discipline area, commercial applications and the knowledge economy.



17. When requested act as a representative or member of committees, using the opportunity to extend their own professional experience. 18. 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. 19. Maintain and enhance links with the professional institutions and other related bodies. 20. 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 logbook records are deposited with the University/Principal Investigator on completion of the work. 21. To promote equality and diversity in working practices and maintain positive working relationships. 22. 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 **General Duties** activity. 23. To ensure that risk management is an integral part of any decision making process, by ensuring compliance with the University's Risk Management Policy. 24. Any other duties as agreed by the Faculty / Directorate / Service Area. **Essential criteria:** 1. An undergraduate degree qualification or equivalent in Psychiatry Epidemiology/Public Health/Health Data Science. 2. Enthusiasm for becoming involved in mental health research and health informatics. 3. Evidence of the ability or enthusiasm, to actively engage in and contribute to writing and publishing research papers preferably in the area of epidemiology/public health, particularly for refereed journals. 4. Evidence of the capacity or enthusiasm, for active engagement in designing research and writing, or contributing to writing, applications for external research funding. 5. A demonstrable ability to conduct research in line with the objectives of the project. 6. Ability to demonstrate significant independence of focus and direction in research – contributing to determine the 'what, why, when and with whom' to progress work. 7. Proficiency in programming languages such as Python, R, SQL. Person 8. Evidence of knowledge in epidemiology and/or statistics. 9. Evidence of conducting analyses and interpreting the results. **Specification** 10. Familiarity with data preprocessing, cleaning, and structuring for machine learning applications. 11. Familiarity with programming libraries like TensorFlow, PyTorch, or Scikit-learn. 12. Ability to manage own tasks and administrative activities to meet deadlines. 13. Good communication skills both written and oral. 14. Evidence of planning skills to contribute to the research project. 15. A commitment to continuous professional development **Desirable Criteria** 16. A post-graduate qualification in a related field. 17. Experience in using AI for predictive analytics in mental health research and health informatics. 18. Understanding of big data and its integration into ML pipelines. 19. Evidence of own professional development, identifying development needs with reference to Vitae Researcher Development Framework, particularly with regards to probation, performance reviews, and participation in training events.

20. Experience or knowledge of working with big data.



	21. Experience or knowledge of working with routine data such as GP records and hospital admissions, and understanding of NHS and clinical coding thesauri and their use in the NHS.
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 .
Additional Information	Informal enquiries: Dara Almeida Medina dara.almeidamedina@swansea.ac.uk





