Job Description: Research Officer

Faculty:	**Medicine, Health and Life Sciences**
Department/Subject:	**Data Science**
Salary:	**Grade 8: £39,105 to £45,163 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**

Main Purpose of Post	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 DATAMIND, which has been successful in securing funding for a further 5 years to continue to work towards its long-term vision to transform mental health research across the four nations. She is 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. Main duties include: 1. To create mental health phenotypes based on clinical code systems such as SNOMED CT, leveraging data-driven techniques. 2. Conduct surveys to enhance platforms supporting mental health research. 3. Collaborate with others to answer mental health research questions, analysing very large databases with a combination of epidemiological and machine learning methods. 4. To work closely with the DATAMIND, PPIE and SAIL teams supporting the translation of research questions. 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. To contribute to applying for grants to secure funding for research for further AI-driver research. 8. Participate actively in project meetings and contribute to discussions on mental health data science advancements. 9. To assist in project management to ensure successful delivery of all outputs. 10. Any other duties as directed by the Principal Investigator or their nominated representative expected within the grade definition.
	11. Pro-actively contribute to and conduct research, including gather, prepare and analyse data and present results, exhibiting a degree of independence in terms of specifying the focus and direction of that research. 12. Prepare reports, draft patents and papers describing the results of the research, both confidential and for publication. The appointee is expected to be actively engaged in the writing and publishing of research papers, particularly those intended for publication in refereed (eg international) journals or comparable as a normal part of their role. 13. Be self-motivated, apply and use their initiative, aiming to determine suitable ways to tackle challenges and seeking guidance when needed. 14. Use creativity to analyse and interpret research data and draw conclusions on the outcomes. 15. Interact positively and professionally with other collaborators and partners within the Faculty, elsewhere in the University and beyond both in industry/commerce and academia.

	16. Contribute pro-actively to the development of external funding applications to support their own work, that of others and the Faculty and the Institution in general. The appointee will be expected as a normal part of their work to be actively engaged in writing, or contributing to writing such applications.
	17. Contribute to Faculty organisational matters in order to help it run smoothly and to help raise its external research profile.
	18. Keep informed of developments in the field in both technical and specific terms and the wider subject area and the implication for commercial applications and the knowledge economy or academia.
	19. When requested act as a representative or member of committees, using the opportunity to extend their own professional experience.
	20. Demonstrate and evidence own professional development, identifying development needs with reference to Vitae Researcher Development Framework particularly with regard to probation, performance reviews, and participation in training events.
	21. Maintain and enhance links with the professional institutions and other related bodies.
	22. 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	23. To promote equality and diversity in working practices and maintain positive working relationships.
	24. 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.
	25. To ensure that risk management is an integral part of any decision making process, by ensuring compliance with the University's Risk Management Policy.
	26. Any other duties as agreed by the Faculty / Directorate / Service Area.
Person Specification	**Essential criteria:** 1. A postgraduate 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 writing and publishing research papers preferably in the area of epidemiology/public health, particularly for refereed journals. 4. Evidence of the capacity for active engagement in designing research and writing, or contributing to writing, applications for external research funding. 5. Ability to demonstrate significant independence of focus and direction in research – determining 'what, why, when and with whom' to progress work. 6. Proficiency in programming languages such as Python, R, SQL 7. Evidence of expertise in epidemiology and/or statistics. 8. Evidence of conducting machine learning research and interpreting complex results. 9. Familiarity with data preprocessing, cleaning, and structuring for machine learning applications. 10. Familiarity with programming libraries like TensorFlow, PyTorch, or Scikit-learn. 11. Ability to manage own tasks and administrative activities to meet deadlines. 12. Good communication skills both written and oral. 13. A commitment to continuous professional development. **Desirable Criteria** 14. A PhD in a related field. 15. Experience in using AI for predictive analytics in mental health research and health informatics. 16. Understanding of big data and its integration into ML pipelines. 17. Experience in mental health research and health informatics. 18. Experience of supervising undergraduate or postgraduate student projects.

	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. Evidence of conducting machine learning research and interpreting complex results. 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. 22. Experience of supervising undergraduate or postgraduate student projects
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