**Job Description: Lecturer in Human Computer Interaction and Artificial Intelligence – Enhanced Research Pathway**

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| **Faculty:** | Faculty of Science and Engineering |
| **Department/Subject:** | Department of Computer Science |
| **Salary:** | Grade 8: £38,205 to £44,263 per annum with USS benefits |
| **Hours of work:** | Full time, however applications for part time work or job share will be considered |
| **Number of Positions:** | 1 |
| **Contract:** | This is a fixed term position for 4.5 years, expected start date 1st January 2025 |
| **Location:** | This position will be based at the Bay Campus |

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| **Introduction** | To deliver its sustainable top 30 ambition Swansea University needs a workforce with the differentiated skills necessary to ensure that it can deliver excellence in research, teaching, learning, and the wider student experience, and to be a powerhouse for the regional economy and internationally.  Swansea University’s vision is to transform lives and futures by providing an outstanding academic environment with a balance of excellence between world-class teaching and research, driving impact that is enabled by effective regional and global collaborations. The Department of Computer Science in the Faculty of Science and Engineering is now seeking applications from ambitious and talented individuals to join our academic team.  The Computer Science Department at Swansea University is ranked highly for both teaching and research: The Guardian University Guide 2023 placed it 25th in the UK and 1st in Wales. In REF 2021 we are delighted that 90% of our research is world-leading and internationally excellent, and that we achieved 100% world-leading and internationally excellent ratings in impact, showing that as a department we are dedicated to embedding real-world impact in everything we do. The department is home to eight research groups: Artificial Intelligence; Cyber Security; Education, History and Philosophy; Human Computer Interaction; Intelligent Robotics; Railway Verification; Theoretical Computer Science; and Visual Computing. The Computer Science Department is ranked 126-150 among the world's top institutions in the 2023 Times Higher Education World University Rankings by Subject. |
| **The Role** | We are seeking someone driven to create new understandings of interactive Artificial Intelligence (AI). The post is aligned to and will interact with the 5-year EPSRC Fellowship awarded to Prof. Matt Jones (EP/Y010477/1)[[1]](#footnote-1). The role holder will have a strong interest in human-computer interaction and its integration within and disruption to AI frameworks, models, and algorithms. This is an opportunity to create a transformative and novel new paradigm for human-AI interactions.  The Computer Science Department at Swansea has a strong and long-established Human Computer Interaction research group (see: fitlab.eu) that has been actively pursuing human-centred AI endeavours for over a decade (including spoken language systems research, gestural interactions and an EPSRC Doctoral Training Centre in people-first data and intelligence driven systems). Further, the group has pioneered diversification in digital innovation – including AI – through long term fieldwork in the Global Souths. The Department is also committed and active in the pursuit of Responsible AI (e.g. Jones is the co-research director of the UKRI Responsible AI programme). The role holder would be expected to innovate and advocate in all these regards. In addition, the Department has other research groups (e.g. related to Machine Learning and Robotics) that will enable the role holder to further develop their career and agenda.  The Department runs BSc and MSc programmes that include courses and activities relating to a range of HCI and machine learning/ AI topics. These would offer the candidate an ideal opportunity to develop courses and projects in HCI and its relationship with AI.  The Computer Science Department is based in the Computational Foundry – a £32.5M programme of work that has been part-funded by the European Regional Development Fund through the Welsh Government and Swansea University. The state-of-the-art building, opened in 2018, comprises 7,500m2 of purpose-built Computer Science facilities, and aims to make Swansea a beacon for Computer Science, attracting and retaining world class researchers, building up a talented future workforce who will innovate, challenge, and disrupt. It provides a dedicated set of labs and innovation spaces as well as teaching laboratories and research facilities and is also home to the £5M EPSRC Centre for Doctoral Training Centre in Enhancing Interactions and Collaborations with Data and Intelligence Driven Systems that is training the next generation of research and innovation leaders in human-centred approaches. The Department has longstanding major projects in engaging with business, education, and civic society: our Technocamps Unit and Institute of Coding is a driving force for educational reform in computing in Wales. The University History of Computer Collection is a museum, archive, and study centre for the history of computing and its social influence; it has extensive archives on formal methods. The department housed one of the UK’s six RCUK funded Digital Economy Centres, CHERISH-DE, that has recently platformed a further University investment in transdisciplinary research via Wales’ first Advanced Studies Institute, MASI. Both the Computational Foundry and CHERISH-DE have played a significant role in making the case for the £1Bn Internet Coast City Deal that is seeing Southwest Wales become a vibrant testbed for next generation approaches to health and wellbeing, smart manufacturing, energy sustainability and digital economy services, all underpinned by computational innovations.  A blue sign with white text  Description automatically generated A tall building in a city  Description automatically generated A group of people in a room  Description automatically generated  Informal enquiries are welcome and should be directed to Professor Xianghua Xie, Head of Computer Science, [x.xie@swansea.ac.uk](mailto:x.xie@swansea.ac.uk) or Professor Matt Jones, matt.jones@swansea.ac.uk. |
| **Academic Career Pathways** | The Academic Career Pathways (ACP) scheme is designed to ensure that academic strengths whether in research, teaching, the wider student experience, leadership or innovation and engagement, are all appropriately recognised, developed, valued, and rewarded. There are three enhanced academic strands: Enhanced Teaching and Scholarship; Enhanced Research; and Enhanced Innovation and Engagement.  For more information on Academic Career Pathways, please click [here](http://www.swansea.ac.uk/personnel/promotions/academicpromotions/). These provide indicative performance levels for all academic staff which will be used throughout the recruitment process. Where there are numeric indicators these will be considered in light of the stage of career, hours of work and other commitments. This may be personal circumstances or work related activities outside of academia such as in industry or a clinical setting. You are very welcome to provide any relevant individual circumstances such as career breaks, any periods of leave or secondment or any other absences, which should be taken into account and how these have had an impact on your career development. |
| **Main Purpose of Post: Enhanced Research** | 1. Research Outputs and Activity: Develop and disseminate research outputs in quality publications or other media. 2. Research Projects and Grants: Secure resources to underpin research activity and responsibility for designing, planning and managing a sustained programme of research and of conducting original investigations within agreed timescales and budgets. 3. Esteem: Recognition for contribution to the discipline through making a personal contribution on research developments. 4. Postgraduate Research Student Supervision and Development: Responsible for effective postgraduate research student supervision. |
| **Management** | 1. Contributing to our Activities: Take part in formulating Faculty or University decisions and contribute to activities beyond the immediate research, teaching or scholarship commitments. 2. Participating in Professional Activities: Engage with professional activities related to the discipline through networking at conferences or involvement in external groups. 3. Managing Self and Others: Support and enable the development of colleagues, students and/or yourself. |
| **Teaching and Scholarship** | 1. Teaching Delivery and Review: Effective delivery of teaching, assessment and quality assurance of modules or other equivalent components of the taught portfolio. Review course content and materials, and develop, design and update materials in compliance with quality standards. 2. Teaching Innovation and Impact: Teaching practice based innovation which is up to date and informed by research or professional practice. 3. Advancing Practice: Responsible for advancing personal teaching practice. |
| **General Duties** | 1. Promote equality and diversity in working practices and maintain positive and collaborative working relationships. 2. 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. 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. |

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| **Person Specification Criteria** | **Typically evidenced by:** |
| **Qualifications** | |
| 1. A PhD in a relevant subject area or a degree and relevant professional experience or qualification | *PhD (or soon to be completed), indicating the research area in the application; chartered membership of professional body, etc.* |
| 1. Recognised teaching qualification or equivalent or a commitment to achieve this | *If you do not have a recognised teaching qualification then evidence is required of a commitment to work towards Fellowship of the Higher Education Academy (HEA) or equivalent.* |
| **Enhanced Research** | |
| 1. A record of research outputs and dissemination in quality publications or other media. | *Four internationally excellent outputs, or the ability to achieve this within a 5 year period.* |
| 1. Demonstrate the potential to achieve, or having success in securing resources to underpin original research activity. | *Applications for research grants as a Principal or Co-Investigator or demonstrate how you will achieve this with at least one successful award within 3 years.* |
| 1. Recognition for contribution to the discipline. | *At least one presentation at a conference with a national or international reach within 3 years.* |
| 1. Evidence of demonstrating involvement in effective postgraduate research supervision, or the ability to do so. | *Supporting and or mentoring students or others* |
| **Core Teaching** | |
| 1. Evidence of or ability to undertake effective delivery of teaching, assessment and review of modules or other components of the taught portfolio. | *- a good teaching feedback and/or through improved progression or retention*  *- Acting as an effective tutor or student project supervisor with successful outcomes.*  *- a commitment to innovative teaching and CPD* |
| **Core Management** | |
| 1. Taking an active part in decisions and activities in an academic unit or institution, beyond own research and teaching commitments. | *Examples showing personal contribution and impact.* |
| **Subject Specific** | |
| 1. Excellent research in HCI with particular emphasis on interactions with AI/ ML. | *- Application/CV. Research outputs in recognised international venues* |
| **Welsh Language** | |
| 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/).  ***Subject Specific*** | |

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1. https://gow.epsrc.ukri.org/NGBOViewGrant.aspx?GrantRef=EP/Y010477/1 [↑](#footnote-ref-1)