Saxton Bampfylde

Swansea University
Prifysgol Abertawe

Professor in Cyber Security

College of Science

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SWANSEA UNIVERSITY / PRIFYSGOL ABERTAWE

Swansea University is a research-led institution that has contributed to the transformation of Swansea as a city of distinction since 1920. The University community thrives on exploration and discovery, and offers a compelling balance of excellent teaching and research, matched by an enviable quality of life. More recently, the University has enjoyed a period of tremendous growth, and we have achieved our ambition to be a top thirty research University, soaring up the 2014 Research Excellence Framework league table from 52nd in 2008 to 26th in the UK in 2014. **In March 2019, Swansea University announced the appointment of Professor Paul Boyle as its next Vice-Chancellor, who will take up post later this year.**

The university is the home of the largest knowledge economy project in the UK, the Bay Campus, one of the top five major infrastructure investments in Europe. This new £450 million development on the eastern approach to the city with direct beach access, together with the transformation of our existing Singleton Park Campus, signals our intention to be one of the finest places to live, teach, research and collaborate in Europe.

Swansea's multicultural dual-campus community provides a global perspective and opportunities to gain skills that last a lifetime. True to the vision of its industrial founders in 1920, Swansea University will:

- Provide an environment of research excellence, with research that is world-leading, globally collaborative and internationally recognised;
- Deliver an outstanding student experience, with research-led and practice-driven teaching of the highest quality that produces global graduates educated and equipped for distinguished personal and professional achievement;
- Use its research strength, collaboration with industry and global reach, to drive economic growth, foster prosperity, enrich the community and cultural life of Wales and, contribute to the health, leisure and wellbeing of its citizens.

You can read more about the University's history, ambitions, and management. For information about Swansea Bay please visit: https://www.abayoflife.com/about-swansea-bay/

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THE COLLEGE OF SCIENCE

The College of Science is research intensive and internationally focussed. Its research is organised through academic disciplines, research centres and institutes, and major projects, all supported by superb research facilities and a thriving research culture.

It has a wealth of expertise in biosciences, chemistry, computer science, human geography, physical geography, mathematics, physics and pure and applied ecology. It produces agenda-setting research of the highest calibre. Building on its recent successes in the REF and the teaching evaluations, the College is focussed on an ambitious Science2020 strategy that will make Swansea a global hub of creativity and innovation in science.

UK Computer Science is very strong in global terms and is a magnet for outstanding staff and students. The Computer Science Department at Swansea University is highly ranked for both teaching and research: The Times Good University Guide 2019 placed it 7th in the UK and 1st in Wales; the Guardian University Guide 2019 placed it 22nd in the UK and 1st in Wales; the National Student Survey 2018 ranked it as 8th in the UK with 91% overall satisfaction, and 1st in Wales; and in the Research Excellence Framework (REF) 2014 it was ranked 18th in the UK and 1st in Wales.

Computer Science at Swansea has embarked on a £31M programme of work – **the Computational Foundry** – 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. The Computational Foundry building comprises nearly 7,500 m² of purpose-built Computer Science facilities on the recently opened £450M Bay Campus. It provides a purpose-built set of labs and innovations spaces as well as teaching laboratories and spaces.

The department has longstanding major projects in engaging with business, education and civic society. Currently, our Technocamps Unit is a driving force for educational reform in computing in Wales. We provide industrial education. The department houses one of the UK's six RCUK funded Digital Economy Centres CHERISH-DE. Both the Foundry and CHERISH-DE have played a role in making the case for the £1BN Internet Coast City Deal signed in March 2017. The City Deal will see South West Wales become a vibrant test-bed for next generation approaches to health and wellbeing, smart manufacturing, energy sustainability and digital economy services, all underpinned by computational innovations.

Academic Career Pathways

The Academic Career Pathways (ACP) scheme is being 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. 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.

This position will align to the Enhanced Research career pathway.

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THE ROLE

This role provides a very exciting opportunity to join an ambitious and highly regarded UK Department of Computer Science, located on a beautiful beachfront campus in the city of Swansea. Swansea is a coastal city that is both picturesque and cosmopolitan, offering an excellent quality of life. Our stimulating, multidisciplinary environment enables and inspires excellence.

Swansea Computer Science has a long tradition of activity of research in new emerging fields since the 1960s, including emerging, underdeveloped or neglected topics such as formal methods and legal aspects of computing.

Computer Science at Swansea is already actively pursuing security agendas in terms of access, identity, privacy and trust. Furthermore, we have recently been awarded an EPSRC Centre for Doctoral Training that will address challenging questions relating to AI and big data including many related to security. With this opening we are looking for someone who wants to make their mark in Computer Science at a special moment in time.

This new appointment will lead the Cyber Security Group. We would be delighted to hear from interested parties who are pioneering new techniques and addressing new problems in cyber security.

We are open to a variety of security specialisms within the broad field of Cyber Security, especially those that resonate with or complement the main research expertise in the Department. Candidates should be able to demonstrate clear commitment to the human-centred ethos of the Foundry in the ways they approach their research and wider impact agendas. At this time we are particularly seeking applications from candidates with expertise in applied/ experimental aspects. Areas of interest are, but not limited to:

- Next Generation Communication Infrastructure, for example 5G Networks; Software Defined Networks; Secure Wireless System;
- Security of IoT Technologies, for example low powered devices, Cyber Physical Systems; Secure Green Computing;
- Secure Programming and Programming Languages; Trusted Computer Systems;
- Sector Based Cyber Security, for example Supply Chains, Industry 4.0; Users and Security; Threat Modelling; Security Policy Development; and
- Usable security.

The Department has space for a Cyber Security Lab that can be shaped by the successful candidate to serve their research.

The focus of the post is to drive forward Cyber Security research in the Department, and to collaborate internationally with academia and industry. The department has recently filled four positions aligned to Cyber Security, and is committed to further growing Cyber Security. The intention is that the appointed Chair will be able to shape further positions in Cyber Security in the near future. The department is offering an MSc in Cyber Security, to provide a pool of professionals and academics to undertake research and development in the field. The department is aiming for appropriate degree-certification (e.g. NCSC-certified degrees) and other relevant recognition (e.g. Academic Centres of Excellence in Cyber Security Research).

The appointed Chair will lead on these initiatives.

UNDEB EWROPEAIDD
EUROPEAN UNION
Llywodraeth Cymru
Welsh Government
Cronfa Datblygu Rhanbarthol Ewrop
European Regional Development Fund

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This post will contribute to the Computational Foundry. The Computational Foundry has been part-funded by the European Regional Development Fund through the Welsh Government and Swansea University. The Computational Foundry will 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.

PURPOSE OF POST

Enhanced Research

1. Research Outputs and Activity: Achieve recognition of excellence in terms of reach, significance and impact of research within the relevant field/discipline. Sustain a distinguished record of, publication of world leading or internationally excellent research outputs with demonstrable impact on leading researchers and the research agenda within the discipline.

2. Research Projects and Grants: Develop and lead major programmes of individual or collaborative research for national or international grants or other awards, as appropriate to the discipline.

3. Esteem: Recognition as an authority and leader in the field/discipline or professional community with demonstrable impact on the strategic direction of future research.

4. Postgraduate Research Student Supervision and Development: Successful PhD supervision and completion.

Management

5. Contributing to our Activities: Take part in formulating College/School or University decisions and contribute to activities beyond the immediate research, teaching or scholarship commitments.

6. Participating in Professional Activities: Engage with professional activities related to the discipline through networking at conferences or involvement in external groups.

7. Managing Self and Others: Support and enable the development of colleagues, students and/or yourself.

Teaching and Scholarship

8. 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.

9. Teaching Innovation and Impact: Teaching practice based innovation which is up to date and informed by research or professional practice.

10. Advancing Practice: Responsible for advancing personal teaching practice.

General Duties

11. Promote equality and diversity in working practices and maintain positive and collaborative working relationships

12. 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

13. Ensure that risk management is an integral part of any decision making process, by ensuring compliance with the University's Risk Management Policy.

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THE PERSON

The successful candidate will be able to evidence the following criteria:

- A PhD in a relevant subject area or a postgraduate degree and relevant professional experience or qualification;
- Recognised teaching qualification that would lead to Fellowship of the Higher Education Academy (HEA) or a commitment to achieve this;
- A sustained and distinguished record of publications of world leading or internationally excellent research outputs, in terms of reach, significance and impact;
- A sustained record of developing and attracting funding for and leading major programmes of individual or collaborative research for national or international grants, or other awards, as appropriate to the discipline;
- Recognition as an authority and leader in their field/discipline;
- Evidence of an extensive and sustained record of PhD supervision and completion;
- Evidence of taking an active part in decisions and activities in an academic unit or institution, beyond own research and teaching commitments;
- Engagement with professional activities relating to the discipline;
- Evidence of international leadership and excellence in Cyber Security research.

TERMS OF APPOINTMENT

This is a full time, permanent position based within the College of Science at the Bay Campus. Competitive package offered with USS pension benefits.

Information about joining Swansea University can be found here:

http://www.swansea.ac.uk/personnel/new-staff/

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HOW TO APPLY

Saxton Bampfylde Ltd is acting as an employment agency advisor to Swansea University on this appointment.

Candidates should apply for this role through our website at **www.saxbam.com/appointments using code WASYH.**

Click on the '**apply'** button and follow the instructions to upload a CV and cover letter.

Closing Date: 06/05/2019