



Position Title Lecturer (Medical Applications of Artificial Intelligence)

Classification Level B (Teaching and Research)

School/Division School of Physics, Mathematics and Computing

Centre/Section Computer Science and Software Engineering

Supervisor Title Head of School

Supervisor Position Number SR

Position Number SR

Your work area

The School of Physics, Mathematics and Computing (PMC) is renowned for its award-winning researchers, teachers, and facilities. A wide range of research activities complements the broad-based undergraduate and postgraduate programs. The School is a leader in developing graduates with high-level expertise in Computer Science, Data Science, Software Engineering, Artificial Intelligence, Mathematics, Statistics, Physics, Astrophysics and Medical Physics. Our strong partnership with Sir Charles Gairdner Hospital and private medical centres across Perth, interstate, and overseas presents numerous medically focused research opportunities.

Reporting structure

Reports to: Head of School

Your role

This position will undertake independent teaching and research in the area of Medical Physics and Machine Learning. As the appointee you will make a long-term contribution to research and teaching excellence. The role involves University teaching in computer science, machine learning and medical physics subjects, ideally including lecturing, unit co-ordination, and assessment design as well as lab demonstration and other teaching activities. The appointee is expected to help the school increase collaboration between the computing and medical physics disciplines, promote co-supervision, and aim to attract collaborative research funding.

Your key responsibilities

Contributes to outstanding teaching and learning outcomes

Contribute to world-class teaching in the degree programs of the Department, particularly in Computer Science and Medical Physics, at both Undergraduate and Postgraduate levels; undertake administrative duties as required (including online teaching)

Contribute to developing undergraduate and postgraduate education policy and curricula to ensure an excellent student experience

Provide high quality supervision of Honours, Masters and PhD students and research projects



Attract and recruit quality postgraduate students and postdoctoral research fellows

Design and implement best practice assessment of student learning outcomes and participate in assessment panels

Contributes to research outcomes within discipline or area of expertise

Undertake independent and collaborative research to generate research outputs of high impact

Communicate research findings through scientific publications, reports, meetings and teaching

Engage with a network of contacts with local, national and international universities for the purposes of research collaboration and the enhancement of the reputation of the School and the University

Enhance the reputation of the School and the University by producing publications in highly ranked peer reviewed journals of international standing

Either as an individual or as part of a team, play a role in bids for major research funding from national and international competitive funding agencies, industry and government partners

Service and Engagement

Contribute to the governance and collegial life within the School, and University and more broadly outside the institution

Work within the legislative requirements of the University and support the University's commitment to inclusion and diversity.

Represent the University of Western Australia through involvement in professional associations, conferences, non-academic (e.g. government, not-for-profit, industry) partnerships, and other external activities.

Maintain current knowledge of standards of practice and required student assessment procedures and ensure these are completed to required standard and time frame

Contribute to team activities such as team and school meetings, strategic planning and program development

Undertake administrative duties as required in relation to the above teaching and research supervision.

Perform other duties as directed by the Head of School and the Discipline Chair.

Your specific work capabilities (selection criteria)

Qualifications and / or certifications

A PhD in the application of Artificial Intelligence to Medical Physics or a similar field relevant to the discipline, with a qualification or experience as a medical physicist preferred

Teaching and learning

Demonstrated ability to deliver teaching approaches, assessment and materials for units and courses

Demonstrated commitment to inclusive teaching practices to extend equality of opportunity for all learners

Research

A demonstrated track record in excellence in research evidenced by peer-reviewed journal articles published in high quality journals relative to opportunity

An emerging track record of successful competitive funding application





Demonstrated evidence of successful supervision or co-supervision of HDR students, relative to opportunity

Service/ Engagement

Participation in education/research leadership in public engagements that promote research and/or education outcome, government and industry

Demonstrated ability to relate well to staff and students at all levels and evidence of a commitment to equity and diversity principles

Demonstrated ability to contribute positively to team, school and wider University activities such as team and school meetings, strategic planning and program development

Special requirements (selection criteria)

There are no special requirements

Compliance

Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including:

The University's Code of Conduct CodeofEthicsandCodeofConduct

Inclusion and Diversity web.uwa.edu.au/inclusion-diversity

Safety, health and wellbeing <u>SafetyandHealthPolicy</u>