



Australian
National
University

Position Description

College/Division:	College of Engineering and Computer Science
Faculty/School/Centre:	Research School of Computer Science
Department/Unit:	
Position Title:	Research Fellow/Fellow
Classification:	Academic Level B/C
Position No:	
Responsible to:	Prof. Robert C. Williamson

PURPOSE STATEMENT:

The ANU is launching a major new project on Humanising Machine Intelligence, uniting computer scientists, philosophers, and social scientists in the pursuit of a more ethical future for AI and Machine Learning.

Our goal is to identify where machine intelligence can be socially beneficial, remove the foundational obstacles in the way of developing moral MI, and design algorithmic autonomous decision-making systems that reliably make morally defensible choices.

Position Overview

HMI is a highly focused research project, with a hand-picked team of leading researchers. Each core member adds something unique; all are committed to working closely together to make substantial progress towards moral machine intelligence.

Philosophy and the social sciences are not a bolt-on for the HMI project, but drive the research agenda alongside computer science. Though from different disciplines, we share a common expertise in probabilistic decision-making. Our work, though cross-disciplinary, will meet the highest standards of excellence in each component discipline.

Role Statement:

ANU Academic Level B:

In their role as ANU academic level B in the Research School of Computer Science the appointee will be expected to:

1. Undertake research in the area of the HMI project, independently and as part of a team, with a view to publishing original and innovative results in refereed journals, present research at academic seminars and at national and international conferences, and collaborate with other researchers at a national and/or international level.
2. Seek and secure external funding including the preparation and submission of research proposals to external funding bodies.
3. Contribute, at a reduced intensity relative to a standard faculty appointment, to the teaching activities of the School at the undergraduate and graduate levels. This includes, but is not limited to, the preparation and delivery of lectures and tutorials, the preparation of online material, marking and assessment, consultations with students, acting as subject coordinators and the initiation and development of course/subject material.
4. Supervise students working on individual or group projects at undergraduate, honours, graduate-coursework levels. Assist with supervision of research students.
5. Contribute to the operation of the School.
6. Assist in outreach activities.
7. Maintain high academic standards in all endeavours.
8. Take responsibility for their own workplace health and safety and not wilfully place at risk the health and safety of another person in the workplace.
9. Other duties as required consistent with the classification level of the position.

ANU Academic Level C:

In their role as ANU academic level C in the Research School of Computer Science the appointee will be expected to:

1. Undertake high impact research in the area of the HMI project, independently and as part of a team, with a view to publishing original and innovative results in international refereed journals, present research at academic seminars and at national and international conferences, and collaborate with other researchers at a national and/or international level.
2. Seek and secure external funding including the preparation and submission of research proposals to external funding bodies.
3. Contribute, at a reduced intensity relative to a standard faculty appointment, to the teaching activities of the School at the undergraduate and graduate levels. This includes, but is not limited to, the preparation and delivery of lectures and tutorials, the preparation of online material, marking and assessment, consultations with students, acting as subject coordinators, the initiation and development of course/subject material, and actively leading overall curriculum development in the discipline.
4. Supervise research students.
5. Contribute to the operation of the School.

SELECTION CRITERIA:

Academic level B:

1. A PhD in machine learning or allied discipline relevant to the HMI project (economics, engineering, mathematics, philosophy, political science, statistics, sociology), with a track record of independent research in the field of machine intelligence as evidenced by publications in peer-reviewed journals and conferences, a record of developing and maintaining collaborations, and other indicators of peer recognition such as awards, invitations to give talks at leading conferences etc.
2. Evidence of the ability to articulate and prosecute innovative research in ethical machine learning or closely related topic relevant to the HMI project, and a vision for the activities they will undertake at the ANU.
3. Demonstrated ability to work cooperatively and harmoniously in a team, with the capacity to engage in cross-disciplinary research and build a research community.
4. An ability and commitment to win bids for competitive external funding to support individual and collaborative research activities.
5. Ability and willingness to teach at all levels.
6. The ability to supervise PhD/Masters research students
7. Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
8. A demonstrated understanding of equal opportunity principles and a commitment to the application of these policies in a University context.

Academic level C:

1. A PhD in machine learning or allied discipline relevant to the HMI project (economics, engineering, mathematics, philosophy, political science, statistics, sociology), with a strong track record of independent research in the field of artificial intelligence as evidenced by cited publications in peer-reviewed journals and conferences, a record of developing and maintaining collaborations, and other indicators of peer recognition such as awards, invitations to give talks at leading conferences etc.
2. A track record of articulating and prosecuting innovative research in in ethical machine learning or closely related topic relevant to the HMI project, and a vision for the activities they will undertake at the ANU.
3. Demonstrated ability to work cooperatively and harmoniously in a team with the capacity to engage in cross-disciplinary research and build a research community.
4. A record of winning bids for competitive external funding to support individual and collaborative research activities.
5. Evidence of effective teaching at all levels and of the ability to contribute to setting the education agenda of the School.
6. A track record of successfully supervising PhD/Masters research students
7. Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels
8. A demonstrated understanding of equal opportunity principles and a commitment to the application of these policies in a University context.

Supervisor/Delegate Signature:		Date:	23-05-19
Printed Name:	Robert C. Williamson	Uni ID:	U9000163



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Pre-Employment Work Environment Report

Position Details

College/Div/Centre	College of Engineering and Computer Science	Dept/School/Section	Research School of Computer Science
Position Title	Research Fellow/Fellow	Classification	Level B/C
Position No.	TBC	Reference No.	

In accordance with the Occupational Health and Safety Act 1991 the University has a duty of care to provide a safe workplace for all staff.

- This form must be completed by the supervisor of the advertised position and forwarded with the job requisition to Appointments and Promotions Branch, Human Resources Division. Without this form jobs cannot be advertised.
- This form is used to advise potential applicants of work environment issues prior to application.
- Once an applicant has been selected for the position consideration should be given to their inclusion on the University's Health Surveillance Program where appropriate – see . http://info.anu.edu.au/hr/OHS/_Health_Surveillance_Program/index.asp
Enrolment on relevant OHS training courses should also be arranged – see http://info.anu.edu.au/hr/Training_and_Development/OHS_Training/index.asp
- 'Regular' hazards identified below must be listed as 'Essential' in the Selection Criteria - see ' Employment Medical Procedures' at http://info.anu.edu.au/Policies/_DHR/Procedures/Employment_Medical_Procedures.asp

Potential Hazards

- Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a **regular** or **occasional** part of the duties.

TASK	regular	occasional	TASK	regular	occasional
key boarding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	laboratory work	<input type="checkbox"/>	<input type="checkbox"/>
lifting, manual handling	<input type="checkbox"/>	<input type="checkbox"/>	work at heights	<input type="checkbox"/>	<input type="checkbox"/>
repetitive manual tasks	<input type="checkbox"/>	<input type="checkbox"/>	work in confined spaces	<input type="checkbox"/>	<input type="checkbox"/>
catering / food preparation	<input type="checkbox"/>	<input type="checkbox"/>	noise / vibration	<input type="checkbox"/>	<input type="checkbox"/>
fieldwork & travel	<input type="checkbox"/>	<input type="checkbox"/>	electricity	<input type="checkbox"/>	<input type="checkbox"/>
driving a vehicle	<input type="checkbox"/>	<input type="checkbox"/>			
NON-IONIZING RADIATION			IONIZING RADIATION		
solar	<input type="checkbox"/>	<input type="checkbox"/>	gamma, x-rays	<input type="checkbox"/>	<input type="checkbox"/>
ultraviolet	<input type="checkbox"/>	<input type="checkbox"/>	beta particles	<input type="checkbox"/>	<input type="checkbox"/>
infra red	<input type="checkbox"/>	<input type="checkbox"/>	nuclear particles	<input type="checkbox"/>	<input type="checkbox"/>
laser	<input type="checkbox"/>	<input type="checkbox"/>			
radio frequency	<input type="checkbox"/>	<input type="checkbox"/>			
CHEMICALS			BIOLOGICAL MATERIALS		
hazardous substances	<input type="checkbox"/>	<input type="checkbox"/>	microbiological materials	<input type="checkbox"/>	<input type="checkbox"/>
allergens	<input type="checkbox"/>	<input type="checkbox"/>	potential biological allergens	<input type="checkbox"/>	<input type="checkbox"/>
cytotoxics	<input type="checkbox"/>	<input type="checkbox"/>	laboratory animals or insects	<input type="checkbox"/>	<input type="checkbox"/>
mutagens/teratogens/ carcinogens	<input type="checkbox"/>	<input type="checkbox"/>	clinical specimens, including blood	<input type="checkbox"/>	<input type="checkbox"/>
pesticides / herbicides	<input type="checkbox"/>	<input type="checkbox"/>	genetically-manipulated specimens	<input type="checkbox"/>	<input type="checkbox"/>
			immunisations	<input type="checkbox"/>	<input type="checkbox"/>
OTHER POTENTIAL HAZARDS (please specify):					

Supervisor's Signature:		Print Name:	Sylvie Thiebaut	Date:	12-12-18
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