



## Position Description

<b>College/Division:</b>	ANU College of Asia and the Pacific (CAP)
<b>Faculty/School/Centre:</b>	Coral Bell School of Asia Pacific Affairs
<b>Department/Unit:</b>	The Research Fellow will be based in one of the five departments within the School, depending on the best fit for his/her particular area of expertise: the Department of International Relations, the Strategic and Defence Studies Centre, the Asia Pacific College of Diplomacy, the Department of Pacific Affairs, or the Department of Political and Social Change.
<b>Position Title:</b>	Research Fellow
<b>Classification:</b>	Academic Level B
<b>Position No:</b>	
<b>Responsible to:</b>	Director, Coral Bell School of Asia Pacific Affairs
<b>Number of positions that report to this role:</b>	
<b>Delegation(s) Assigned:</b>	

### PURPOSE STATEMENT:

The ANU is seeking world-class researchers to join a team of social scientists, philosophers, and computer scientists, to make Australia a global leader in the field of moral AI. Our goal is to identify where machine intelligence can be maximally socially beneficial, remove the foundational obstacles in the way of developing moral AI, and together design algorithmic autonomous decision-making systems that reliably make morally defensible choices.

### KEY ACCOUNTABILITY AREAS:

#### Position Dimension & Relationships:

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

Machine intelligence is already used in innumerable applications that, while not explicitly morally-loaded, have clear and profound social implications, from facial recognition, to the distribution of online attention. It is also used to support decisions that have explicit moral dimensions, for example about how to allocate welfare resources, and whom to grant bail or parole. And the application of MI in fully autonomous decision-making systems (robotic and otherwise) is picking up pace. Self-driving vehicles, autonomous weapons systems, and companion robots are the first wave of such systems; many more are on the way. Many companies and governments are also heavily invested in developing more general, multipurpose forms of AI. All of these autonomous systems must be able to make morally-loaded decisions by themselves.

In each of these fields inadequate attention to ethics in the design of MI systems will predictably have negative social consequences, some of which could be catastrophic. The goal of the HMI project is to forestall those risks, and help to realise the tremendous social benefits promised by MI. The project has three components: (1) Discovery: formulate the design problem by identifying the social risks and opportunities of widespread reliance on MI. (2) Foundations: identify and answer the fundamental theoretical questions on which progress towards ethical MI depends. (3) Design: develop ethical algorithms and broader MI systems in partnership with industry and government. The successful candidate would directly contribute to one or more of these components, and, along with the other research fellows, would be involved in a collaborative endeavour that brings together all three.

The HMI project chief investigators are: Associate Professors Seth Lazar (Project Leader), Professor Toni Erskine (International Relations / Politics), Colin Klein and Katie Steele (Philosophy), Professors Marcus Hutter, Sylvie Thiébaux, Bob Williamson and Lexing Xie (Computer Science), Dr. Jenny Davis (Sociology), and Associate Professor Idione Meneghel (Economics).

We are looking for up to eight talented researchers to help us humanise machine intelligence. Our primary criterion is demonstrated research excellence in a discipline area relevant to the project, and the clear potential to be research leaders in their disciplines and in the field of moral AI. An interdisciplinary background is not required, but successful applicants will be ready and equipped to engage with scholars from other disciplines, and are expected to work actively with scholars from at least two of the project's discipline areas.

Successful applicants will help us design the next generation of more ethical MI systems, in part through publishing internationally influential research in the leading peer-reviewed venues (as suited to their discipline). We expect them to go on from the ANU to leading positions in academia and industry. As well as conducting research at the highest level, they will help build the HMI community at ANU and globally, through convening a regular seminar series and international workshops.

At this time, one of the new research positions will be based in the Coral Bell School of Asia Pacific Affairs (Bell School). For this position, we strongly encourage applications from people with PhDs in Politics, Political Science, Political Philosophy, or International Relations, with a background working in any relevant subfield. Prior experience working on machine intelligence is advantageous but not required.

The Bell School is a world-leading centre for research, education, and policy analysis on international and Asia Pacific politics, security, diplomacy, and strategic affairs. The School is made up of five vibrant units: the Department of International Relations, the Strategic and Defence Studies Centre, the Asia Pacific College of Diplomacy, the Department of Pacific Affairs, and the Department of Political and Social Change.

Although this position will be housed in the Bell School, we welcome anyone who meets the selection criteria (see below) to apply for any of the research fellowships that will contribute to this project, regardless of disciplinary background.

### **Role Statement:**

Under the broad direction of the Director, Coral Bell School of Asia Pacific Affairs, the Research Fellow will:

1. Undertake research in the area of the HMI project, independently and as part of a team, with a view to: publishing original, innovative, and high impact research in world-leading refereed journals; presenting research at academic seminars and at national and international conferences; and collaborating with other researchers at a national and international level.
2. Actively seek and secure external funding including the preparation and submission of research proposals to external funding bodies.
3. Build the HMI research community by helping organise regular seminars, reading groups, and workshops.
4. Contribute, at a restricted intensity, to the teaching activities of the School at the undergraduate and graduate levels.
5. Supervise students at undergraduate, honours, graduate-coursework levels. Assist with supervision of research students. Supervise less senior academic staff and research support staff in your research area.
6. Actively contribute to all aspects of the operation of the School.
7. Assist in outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
8. Maintain high academic standards in all education, research and administration endeavours.
9. Comply with all ANU policies and procedures, and in particular those relating to work health and safety and equal opportunity
10. Other duties as required consistent with the classification level of the position.

### **Skill Base**

A **Level B Academic** will normally have completed a relevant doctoral qualification or have equivalent qualifications or research experience.

In addition he/she may be expected to have had post-doctoral research experience that has resulted in publications, conference papers, reports or professional or technical contributions that give evidence of research ability.

**SELECTION CRITERIA:**

1. A PhD in one of the following at the time of appointment: political science/politics; international relations, philosophy, computer science, mathematics, economics, sociology, engineering, or another relevant discipline.
2. Demonstrated capacity to pursue research at the highest levels of international scholarship in their discipline with potential to be a research leader within their field.
3. Evidence of the ability to articulate and prosecute innovative research in the field of the HMI project and a vision for the activities they will undertake at the ANU.
4. The ability to work as part of a team, meeting deadlines and being primarily responsible for project delivery in some areas. Capacity to engage in cross-disciplinary research collaboration and build a research community.
5. An ability and commitment to win bids for competitive external funding to support individual and collaborative research activities.
6. Ability and willingness to teach at all levels.
7. The ability to supervise and graduate high quality PhD/Masters research students
8. 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.
9. A demonstrated high-level understanding of equal opportunity principles and a commitment to the application of these policies in a University context.

<b>Supervisor/Delegate Signature:</b>		<b>Date:</b>	20 Dec. 2018
Printed Name:	Toni Erskine	<b>Uni ID:</b>	U1050931

**References:**

[General Staff Classification Descriptors](#)

[Academic Minimum Standards](#)



Australian  
National  
University

# Pre-Employment Work Environment Report

## Position Details

College/Div/Centre	CAP	Dept/School/Section	Coral Bell
Position Title	Research Fellow	Classification	Academic Level B
Position No.		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](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](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](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"/>			
<b>NON-IONIZING RADIATION</b>			<b>IONIZING RADIATION</b>		
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"/>			
<b>CHEMICALS</b>			<b>BIOLOGICAL MATERIALS</b>		
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"/>
<b>OTHER POTENTIAL HAZARDS (please specify):</b>					

Supervisor's Signature:		Print Name:		Date:	
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