



College/Division:	ANU College Engineering and Computer Science (CECS)
Faculty/School/Centre:	Autonomy, Agency and Assurance (3A) Institute
Department/Unit:	Institute for Water Futures (IWF)
Position Title:	Research Fellow / Fellow
Classification:	Academic Level B or Academic Level C
Position No:	TBC
Responsible to:	Associate Professor Katherine Daniell (CECS) and Associate Professor Lorrae Van Kerkhoff (IWF)
Number of positions that report to this role:	
Delegation(s) Assigned:	

## PURPOSE STATEMENT:

The Australian National University (ANU) made a major and on-going investment in water research through its National Institute Grant to establish the Institute for Water Futures (IWF). The IWF brings together researchers in 10 water related positions from across sciences, social sciences, humanities and public policy within the ANU and has established research partnerships with state and federal water agencies, such as Commonwealth Scientific and Industrial Research Organisation (CSIRO), Murray Darling Basin Authority (MDBA), and other research organisations. The IWF mission is to support sustainable water futures and to identify transformative, innovative and robust strategies to resolve the water challenges of today and tomorrow.

This position is located in Autonomy, Agency and Assurance (3A) Institute, within the College of Engineering and Computer Science (CECS).

CECS has embarked on a 15-year project to reimagine a new type of engineering and computing, one that is custom built and fit for the middle of the 21st century. The 3A Institute is a flagship initiative within the Reimagine project. Launched in 2017, the 3A Institute brings together a team of professional staff and researchers from a range of disciplinary and professional backgrounds to build a new applied science that will enable the safe, efficient and ethical deployment of AI at scale. By 2022, the 3A Institute aims to have set a new intellectual framework combining both theory and praxis, and to have built a curriculum to train the first generation of certified practitioners and intellectual leaders of this new applied science.

The Research Fellow/Fellow is expected to provide practice-led input in a professional area of interest to the building of the new applied science. The Research Fellow/Fellow will contribute to the 3A Institute's research, engagement and knowledge transmission activities, including the design and delivery of research programs, courses and masterclasses; the publication of traditional and non-traditional research outputs; the supervision of students; the development of creative and practice-orientated work programs and initiatives; the provision of support for engagement with stakeholders towards securing financial, human and/or intellectual support for the research through both internal and external mechanisms.

## POSITION DIMENSION AND RELATIONSHIPS:

The Research Fellow/Fellow will be a member of the Institute of Water Futures working within the 3A Institute within the ANU College of Engineering and Computer Science, accountable to Associate Professor Katherine Daniell and Director of the Institute for Water Futures, Associate Professor Lorrae Van Kerkhoff (IWF). The Research Fellow / Fellow will be expected to work collegially, leading by example to develop and maintain effective, productive and beneficial workplace relationships within the all academic and professional School and College staff, students and honorary appointees, as well as with industry stakeholders to support the strategic priorities of the Institute, Institute for Water Futures, College and University. This position will also have a mentoring role for students and will engage in collegial and productive collaborations with local, national and where possible, international colleagues.

**Role Statement:**

In their role as an Academic Level B or C the Research Fellow / Fellow is expected to:

**Level B**

1. Undertake high impact collaborative and cross-disciplinary research and creative works to contribute to the creation of a new applied science, and body of unique intellectual knowledge.
2. Provide support to the engagement and impact activities of the Institutes, with the aim to engage and activate a stakeholder community in academia / industry / start-ups / government / civil society.
3. Provide, in a collaborative manner, practice-led input into traditional and non-traditional academic outputs developed by the 3A Institute and the Institute for Water Futures.
4. Contribute to the educational activities of the Institutes. This includes, but is not limited to, the preparation and delivery of lectures, tutorials, short courses and workshops; the preparation and delivery of professional and executive education courses; the preparation of online material; marking and assessment; and consultations with students.
5. Supervise at varying levels students working on individual or group projects.
6. Contribute to all aspects of the operation of the Institutes, College and University more broadly.
7. Maintain practice and collegiality in all education, research, engagement and impact endeavours undertaken by the Institutes, the College and the University.
8. Take responsibility for their own workplace health and safety and not willfully 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.

**Level C**

1. Conduct high impact collaborative and cross-disciplinary research and creative works to contribute to the creation of a new applied science, and body of unique intellectual knowledge
2. Proactively support the engagement and impact activities of the Institute, with the aim to identify, engage and activate a stakeholder community in academia / industry / start-ups / government / civil society.
3. Provide, in a collaborative manner, practice-led expertise into traditional and non-traditional academic outputs developed by the 3A Institute and the Institute for Water Futures;
4. Contribute to the educational activities of the Institutes. This includes, but is not limited to, the preparation and delivery of lectures, tutorials, short courses and workshops; the preparation and delivery of professional and executive education courses; the preparation of online material; marking and assessment; and consultations with students.
5. Supervise at varying levels students working on individual or group projects.
6. Lead, supervise and develop less senior academic and research support staff in the Institutes. Provide mentoring and career development advice in alignment with the performance development process at the ANU.
7. Proactively contribute to all aspects of the operation of the Institutes, College and University more broadly. This may include taking broad supervisory roles.
8. Maintain practice and champion intellectual leadership and collegiality in all education, research and administration endeavours undertaken by the Institutes, the College and the University.
9. Take responsibility for their own workplace health and safety and not willfully place at risk the health and safety of another person in the workplace.
10. Other duties as required consistent with the classification level of the position.

**Indicators of success:**

The following indicators are only guidelines aiming to illustrate expectations for practice-led positions at progressive levels. The appointee will define and collaboratively deliver a contribution to the 3A Institute, Institute for Water Futures, College and University regarding its research, teaching, operations, commercial partnerships and reputation, which reflects their expertise and experience, within the period of tenure.

Specific target outputs and indicators of success will be developed in dialogue between the appointee, the 3A Institute, the Institute for Water Futures and (where relevant) the College, consistently with the CECS Academic Performance Standards. The position description and indicators of success will be reviewed following an agreed schedule. They will support a transparent performance development and progression process during the period of tenure and are, as a result, cumulative at progressive levels:

**Level B**

The appointee's practice-led experience and expertise are integrated in targeted intellectual work and outputs of the 3Ai Institute and Institute for Water Futures. The appointee's practice conversely reflects his/her interaction with the 3A Institute's intellectual work;

## Level C

The appointee has developed sustainable pathways to enable the integration of her/his practice-led experience and expertise into multiples areas of the intellectual work of the 3A Institute and Institute for Water Futures. The appointee conversely leverages her/his practice to champion the 3A Institute's work in an impactful manner at a national level.

## SELECTION CRITERIA

The 3A Institute operates at the forefront of global discussions in a field of transformative significance. The Academic Fellow is expected to leverage their professional background to make a strong contribution within this non-traditional academic environment. The breadth and depth of this role are illustrated in the below selection criteria. **While candidates should ideally meet all selection criteria, the 3A Institute will consider all applications that demonstrate alignment with its objectives.**

### Level B

1. A PhD that is relevant to the new applied science and the Institute for Water Futures OR an equivalent, demonstrated sustained intellectual leadership, in an area of relevance to the new applied science and the Institute for Water Futures, in non-academic environments.
2. A competitive track record of contribution, relative to opportunity, to their field of practice, as evidenced by high impact outputs in relevant and leading venues; a record of developing and maintaining collaborations with fellow practitioners, researchers, institutes and non-academic partners; and by other measures such as awards (professional, research, teaching, etc.), invitations to give presentations at conferences, membership of professional institutes, patents, exhibits, broadcasts, entrepreneurship, policy or community work, etc.
3. A demonstrated alignment with the 3A Institute culture and work environment, characterised by its strong orientation to collaborative research; team-based projects; interdisciplinary activities and interests; strategic decision making; and commitment to the success of peers and the team.
4. Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and stakeholders in a cross-disciplinary academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels. Skills in other forms of communication (such as visual communication, podcasting, video, etc.) or a willingness to innovate in these areas will be well regarded.
5. Potential and interest in teaching at all levels and in contributing significantly to the delivery of the educational agenda of the Institutes.
6. Potential and interest in fostering education at varying levels, along with a commitment to outreach activities involving the general community, schools, public sector, industry and the wider research community.
7. A demonstrated understanding of diversity and inclusion principles and a commitment to the application of these policies in a University context.

### Level C

1. A PhD that is relevant to the new applied science and the Institute for Water Futures OR an equivalent, demonstrated sustained intellectual leadership, in an area of relevance to the new applied science and the Institute for Water Futures, in non-academic environments.
2. An outstanding track record of independent contribution, relative to opportunity, to their field of practice, as evidenced by high impact outputs in relevant and venues; a record of developing and maintaining collaborations with leading practitioners, researchers, institutes and non-academic partners; and by other measures such as awards (professional, research, teaching, etc.), invitations to give presentations at leading conferences, membership of leading professional institutes, patents, exhibits, broadcasts, entrepreneurship, major policy or community work, etc.
3. A demonstrated alignment with the 3A Institute culture and work environment, characterised by its strong orientation to collaborative research; team-based projects; interdisciplinary activities and interests; strategic decision making; and commitment to the success of peers and the team.
4. A demonstrated record of developing partnerships to support individual and collaborative research or practice-based activities, and the ability to identify similar opportunities for others to pursue.
5. Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and stakeholders in a cross-disciplinary academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels. Skills in other forms of communication (such as visual communication, podcasting, video, etc.) or a willingness to innovate in these areas will be well regarded.
6. Potential and interest in effective teaching at all levels and in contributing significantly to the design and delivery the educational agenda of the Institutes.
7. Potential and interest in fostering education at varying levels along with a demonstrated commitment to outreach activities involving the general community, schools, public sector, industry and the wider research community.
8. Demonstrated practice-based ability to mentor and develop colleagues to achieve goals in alignment with the Institute's

strategic priorities, particularly in relation to building a diverse and inclusive community life.

9. A demonstrated understanding of diversity and inclusion principles and a commitment to the application of these policies in a University context.

Delegate Signature:		Date:	26/09/2019
Printed Name:	Associate Professor Katherine Daniell	Position:	Research Lead

References:
<a href="#">Academic Minimum Standards</a>

 <p><b>Australian National University</b></p>	<h2>Pre-Employment Work Environment Report</h2>
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**Position Details**

<b>College/Div/Centre</b>	ANU College Engineering and Computer Science (CECS)	<b>Dept/School/Section</b>	Autonomy, Agency and Assurance (3A) Institute
<b>Position Title</b>	Research Fellow / Fellow	<b>Classification</b>	Academic Level B / C
<b>Position No.</b>	TBC	<b>Reference No.</b>	

*In accordance with the Work Health and Safety Act 2011 (Cth) the University has a duty to provide a safe workplace.*

- This form must be completed by the Supervisor of the advertised position and forwarded with the job requisition to Recruitment and Appointments Branch, Human Resources Division. Without this form jobs cannot be advertised.
- This form is used to advise potential applicants of work environment hazards 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 [Health Surveillance Procedure](#)
- Enrolment on relevant Work, Health and Safety (WHS) training courses should also be arranged – see [WHS Training & Induction](#)
- Consideration should be given as to whether 'Regular' hazards identified below should be listed as 'Essential' in the Selection Criteria

**Potential Hazards**

<ul style="list-style-type: none"> <li>• Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a <b>regular</b> or <b>occasional</b> part of the duties.</li> </ul>					
<b>TASK</b>	<b>regular</b>	<b>occasional</b>	<b>TASK</b>	<b>regular</b>	<b>occasional</b>
keyboarding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	laboratory work	<input type="checkbox"/>	<input checked="" 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 checked="" 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"/>

OTHER POTENTIAL HAZARDS (please specify):

Supervisor's  
Signature:



Print Name: Katherine Daniell

Date: 26/09/2019