



Position Description

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| College/Division: | ANU College of Computer Science and Engineering |
| Faculty/School/Centre: | Research School of Computer Science |
| Position Title: | Research Fellow |
| Classification: | Level B |
| Responsible to: | Prof. Jochen Renz |
| Number of positions that report to this role: | 1 |

PURPOSE STATEMENT:

The Research Fellow will contribute to the objectives of an externally funded project on novelty characterisation and generation in the context of the video game Angry Birds. The project is currently funded for 18 months, but can be extended to up to 42 months, and will begin in November 2019. The Research Fellow will work collaboratively to strengthen and support the Research School of Computer Science as an international centre of excellence in Artificial Intelligence and Games.

POSITION DIMENSION AND RELATIONSHIPS:

The Research Fellow will be a member of Research School of Computer Science, accountable to the Director of the School and supervised by Professor Jochen Renz. The Research Fellow will be expected to work collegially, leading by example to develop and maintain effective, productive and beneficial workplace relationships with all academic and professional School and College staff, students and honorary appointees, as well as other stakeholders. This position is part of an externally funded research project, and the Research Fellow is expected to take a significant role in contributing to meeting the project's objectives, deliverables and deadlines. This position will also have a mentoring role for students and will engage in collegial and productive collaborations with local, national and international colleagues.

The Research Fellow may also be asked to supervise relevant student research projects, professional and administrative support staff involved in the staff member's research and/or the project, or mentor less senior staff.

Role Statement:

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

1. Undertake research in the area of Artificial Intelligence and Games, independently and in collaboration with other project team members, 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. The main responsibility of this role is working as part of a team on an externally funded project subject to strict deadlines and deliverables and being primarily responsible for project delivery in some areas. This includes contributing to periodic written project reports to the external funding agency.
3. Develop and maintain a Unity3D-based game platform according to modern Software Engineering standards that can be used to run AI agent competitions. Support in setting up infrastructure and the running of said competitions.
4. Supervise students working on individual or group projects at undergraduate, honours, graduate-coursework levels. Supervision of research students, specifically students working on the same externally funded project.
5. Supervise Postdoctoral Fellow's and research support staff in your research area.
6. Contribute to all aspects of the operation of the School. This may include representation through committee memberships.
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. 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 that are consistent with the classification of the position.

Skill Base

A Level B academic will undertake independent and collaborative research in their discipline or related area. In research and/or scholarship and/or teaching a Level B academic will make an independent contributions through professional practice and expertise and coordinate and/or lead the activities of other staff, as appropriate to the discipline.

A Level B academic will normally engage in independent research and professional activities appropriate to their discipline. The academic may contribute to teaching at undergraduate, honours and postgraduate level, and may be asked to undertake administration relating to their primary activities.

SELECTION CRITERIA:

1. A PhD in Computer Science or a related area, with a track record of independent research in the field of Artificial Intelligence and Games or related areas as evidenced by publications in peer-reviewed journals and conferences, a record of developing and maintaining collaborations and by other measures such as awards, and invitations to present at conferences.
2. Evidence of knowledge and experience that is relevant to AI and Games research in some or all of the following areas: Procedural Content Generation, Game AI Competitions, Game Development, with the ability to articulate and prosecute innovative research in this field. Specific research experience related to the Angry Birds AI competition or the Angry Birds Level Generation Competition would be an advantage but is not essential.
3. Evidence of excellent programming skills, experience with developing substantial game AI software and experience with modern Software Engineering methods including maintaining of multi-developer software repositories such as Git. Specific programming experience with Unity3D, C# and Python, or the ability to quickly familiarise with these platforms, is required.
4. An ability to supervise and graduate high quality PhD/Masters research students.
5. The demonstrated ability to work as part of a team, contributing to team management and meeting deadlines for project elements.
6. 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.
7. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

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| Delegate Signature: | | Date: | 1 November 2019 |
| Printed Name: | Professor Jochen Renz | Position: | |

References:

[Academic Minimum Standards](#)