Position Description

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<th>College/Division:</th>
<th>College of Engineering and Computer Science</th>
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<td>Faculty/School/Centre:</td>
<td>School of Computing</td>
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<td>Position Title:</td>
<td>Research Fellow</td>
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<tr>
<td>Classification:</td>
<td>Academic Level B</td>
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<td>Position No:</td>
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<td>Responsible to:</td>
<td>Alex Potanin or Tony Hosking</td>
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**PURPOSE STATEMENT:**
The ANU College of Engineering and Computer Science (CECS) has embarked on a major initiative to reimagine the role of engineering and computing in the 21st century. As outlined in the CECS Strategic Intent the College has a unique set of national responsibilities and an obligation to have a degree of impact befitting Australia's only national university.

To achieve such impact our College embodies principles and values to guide the pursuit of excellence in education; research, engagement and impact; and collegiality. These principles include collaborative teamwork, common strategic intent, nurturing peer and junior staff members, and acting with purpose and professionalism. These attributes are articulated in the CECS Academic Performance Standards, which also indicate that each individual may pursue a unique path on the basis of their impact—which may cover a range of outputs and impact indicators. Our community contribute to making our environment the very best possible venue for all staff, stakeholder and student bodies.

**KEY ACCOUNTABILITY AREAS:**
The School of Computing is a new organisation, springing from foundations in the computing and information sciences at the ANU. It is a leading centre for research in artificial intelligence and machine learning, computer systems and software, and theoretical foundations of computing. It encompasses traditional computer science but also data science and computational science, addressing the critical need to design, drive and sustain a fundamental program of strategic activities that will launch the new school. This is an opportunity to establish an innovative and forward-looking intellectual agenda, built on a diverse, inclusive culture.

The Computing Foundations activity cluster within the School focuses on the software and hardware foundations of computing, and its theory, to improve the safety, reliability, usability, and performance of computing systems, and to make them scalable and secure. It combines teaching and research in the foundations of computing: logic and verification, theory of computation, computer organisation and architecture, operating systems, formal methods and methodologies for software engineering, user interfaces, and programming languages and tools.

The purpose of this appointment is to:

- Conduct Foundational Computer Science research in the areas of interest to the Computing Foundation cluster, as agreed with the position supervisor, and with a general expected emphasis of work in the areas of programming languages, security, and/or software engineering.
- The role is research-focused. However, the Research Fellow may undertake work in all three areas of academic activity—research, education, and service (including outreach). The allocation of time to each area will be discussed with the position supervisor. The Research Fellow may also be required to supervise or assist in the supervision of students and contribute cooperatively to the overall intellectual life of the School, College and University.

Position Dimension & Relationships:
The appointee will be a member of the School of Computing within the Computing Foundations activity cluster, accountable to their Supervisor and to the School Director. The role involves innovative and distinctive research, educational activities, and a commitment to organizational culture. The staff member is expected to contribute cooperatively to the overall intellectual life of the School, College and University.
Role Statement
Specific duties required of a Research Fellow may include:

1. Undertake independent research in the broad area of programming language design and implementation, including theoretical treatments of the same.
2. Publish original and innovative results in refereed conferences and journals, presenting research at academic seminars and at national and international conferences, and collaborate with other researchers at a national level.
3. Collaborate with senior staff to actively seek and secure external funding, assist to prepare and submit research proposals to external funding bodies as appropriate.
4. Supervise students working on individual or group projects at undergraduate, Honours, graduate-coursework levels. Assist with supervision of research students.
5. Provide support to the outreach, engagement and impact activities of the School, and collaborate with other researchers.
6. Supervise less-senior academic and research staff, as appropriate.
7. Maintain high academic standards and collegiality in all education, research, impact, engagement and administration endeavours of the School, College, and University.
8. Contribute broadly to all aspects of the operation of the School, College and University.
9. Take responsibility for 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.

Selection Criteria
The breadth and depth of this role are illustrated in the following selection criteria. While candidates should ideally meet all selection criteria, the School of Computing will consider all applications that demonstrate alignment with its mission.

1. A PhD or equivalent in the field of Computer Science, or a related area as relevant to the research to be undertaken, with a competitive track record of research in programming languages.
2. Evidence of the ability to publish in peer-reviewed journals and conferences, and a record of developing and maintaining collaborations by other measures such as awards, and invitations to present at conferences.
3. An ability to supervise and graduate high quality postgraduate research students.
4. An ability to work as part of a team, contributing to team management, and a demonstrated ability to meet deadlines.
5. A demonstrated alignment with the School’s culture and work environment including a commitment to enhancing diversity and inclusion, characterised by an orientation to collaborative research; team-based projects; interdisciplinary activities and interests; strategic decision making; commitment to the success of peers and the team; and an ability to contribute to the strategic priorities and activities of the School and College.
6. Excellent communication skills with the ability to inspire a wide range of audiences, including in cross-disciplinary areas and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
7. Ability to mentor and develop colleagues to achieve goals in alignment with the College’s strategic priorities, particularly in relation to building a diverse and inclusive community life.
8. A demonstrated high-level understanding of equal opportunity principles and a commitment to the application of these policies in a University context.

The ANU conducts background checks on potential employees, and employment in this position is conditional on satisfactory results in accordance with the Background Checking Procedure which sets out the types of checks required by each type of position.

References:
ANU Minimum Standards for Academic Levels
CECS Strategic Intent
CECS Academic Performance Standards

For assistance please contact HR Division Ph. 6125 3346