**Australian National University**

# Position Description

| College/Division: | College of Engineering and Computer Science (CECS) |
|---|---|
| Faculty/School/Centre: | School of Computing |
| Department/Unit: | |
| Position Title: | Professor |
| Classification: | Academic Level E |
| Position No: | |
| Responsible to: | Director, School of Computing |
| Number of positions that report to this role: | |
| Delegation(s) Assigned: | |

## 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 contributes to making our environment the very best possible venue for all staff, stakeholder, and student bodies.

## KEY ACCOUNTABILITY AREAS:

The ANU College of Engineering and Computer Science is an interdisciplinary venture, with the aim of housing the very best and brightest from around the world to find and solve problems—not just engineers or computer scientists, but also the brightest minds both from industry and other academic disciplines, with varied backgrounds and areas of expertise. We will reimagine the traditional engineering and computing disciplines. We believe the responsibility of engineering and computing in the 21st century is to bring together expertise on people, technological systems, and science to put technology at the service of creating a more sustainable, responsible and safe world.

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 School of Computing has defined four broad focus areas, or activity Clusters: Intelligent Systems, Data Science/Analytics, Computing Foundations, and Computational Science. Each Cluster has an Academic Lead responsible for shaping and

coordinating education, research, and engagement activities with their Cluster. This structure allows for the concentration of resources and activities to increase potential for meaningful impact. The School of Computing also incorporates the Software Innovation Institute, which has an Academic Translation Lead responsible for shaping the translation activities of the Software Innovation Institute across education, research, and engagement.

The purpose of this appointment is to:

- Support the establishment of innovative, interdisciplinary, outwardly focused programs blending education, research and engagement;
- Support the development of partnerships with industry and engage with the wider research community to embed progressive engineering and computing research and education capabilities;
- Contribute to development of state-of-the-art, unique programs that are globally relevant to equip our students with diverse and multidisciplinary skills.

## POSITION DIMENSION AND RELATIONSHIPS:

The academic will be a member of the School of Computing within one of the four activity Clusters, accountable to or acting as the Cluster Lead and to the School Director, and (as relevant) will handle relationships with industry, government, and other academic and professional staff across the University.

The Cluster Lead will set the strategic agenda for education, research, and engagement within their Cluster, working in collaboration with the School Director, Deputy Director, Associate Directors, and other Cluster Leads to achieve the strategic goals of the School. They will foster new collaborations that strengthen the School as a whole, generating new cross-cutting research, education and engagement programs that are on par with the best in the world.

As a senior academic the role includes significant contributions to educational activities, outward-facing engagement and outreach, innovative and distinctive research, and organizational culture.

In this specific position, the appointee will also work in partnership with both professional and academic staff to support and contribute cooperatively to the strategic priorities of the School of Computing, College and University.

## ROLE STATEMENT:

In their role, the appointee will:

- Undertake and foster high impact collaborative and cross-disciplinary research, that generates creative works and body of unique intellectual knowledge as relevant to the Activity Cluster, School, and College, and aligned to the strategic directions of the School and College.
- Make a leading contribution to the educational activities of the Activity Cluster and School, at the undergraduate and graduate level, as well as to broader educational experiences. This includes, but is not limited to, taking a leadership role in curriculum design and review, design and implementation of innovative pedagogy, the curation and management of degree programs in collaboration with colleagues, the development and delivery of innovative professional and executive education experiences, and a willingness to take on the role of Activity Cluster Lead. This also includes, but is not limited to, supervision of research students and coursework students working on individual or group projects at undergraduate, honours, and graduate levels.
- Lead in establishing and maintaining relationships with industry, government and the wider research community to enhance cross-disciplinary collaborations and support the translation of research outcomes into applications, including taking a leadership role in seeking and generating resources to support the development of deep and transformational expertise in fields relevant to the Activity Cluster, School and College. This will be achieved through engagements with a range of funding bodies through the preparation of a combination of multi-party collaborative research proposals

including state, national and international governmental schemes, philanthropic grants, industry funds, and approved consultancy arrangements.

- Lead and initiate engagement and impact activities of the School, in alignment to the College's strategic agenda, with the aim to engage and activate a stakeholder community in academia / industry / start-ups / government / broader community, including communicating original, innovative and multi-disciplinary results in forums of international esteem (and with more extensive impact measures presented in the CECS Academic Performance Standards), and collaborating with others at an international level. Also, leading outreach activities including to prospective students, research institutes, industry, government, the media, and the general public.

- Lead, supervise, and develop staff within the Activity Cluster and School. Provide leadership, mentoring, and career development advice in alignment with the professional development process at the ANU.

- Maintain, actively promote and champion high academic standards and collegiality in all education, research, impact, engagement and administration endeavours of the School, College and University.

- Proactively contribute more broadly to all aspects of the operation of the School, College and University. This may include taking on leadership and broad supervisory roles.

- Take responsibility for workplace health and safety and not wilfully place at risk the health and safety of another person in the workplace.

- Other duties as required consistent with the classification level of the position.

- Comply with all ANU policies and procedures, and in particular those relating to work health and safety and equal opportunity

## SELECTION CRITERIA:

The following selection criteria capture the breadth and depth of this role. 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 a disciplinary area of the School, or a related area as relevant to the School, with an outstanding track record of either impact or independent research as evidenced by appropriate outputs and measures of esteem in industry, government or academic environments.

2. Outstanding track record of effective and innovative teaching, training, facilitation or other relevant knowledge transmission activity and of the ability to shape and contribute significantly to delivery of the educational agenda in the Activity Cluster, School, and College, including the capacity to foster graduate student education and inspire undergraduate students, along with a commitment to educational activities involving the general community, schools, public sector, industry and the wider research community.

3. Outstanding track record of leadership in engagement and impact activities involving government, industry, the wider research community and the general public, including establishing and maintaining collaborations and partnerships with a range of internal and external stakeholders.

4. A demonstrated commitment to and championing of the School's culture and work environment including a commitment to enhancing diversity and inclusion, characterised by an orientation to collaborative research;

5. team-based projects; interdisciplinary activities and interests; strategic decision making; commitment to the success of peers and the team.

6. A demonstrated commitment to and excellence in collaboration, team-based projects and interdisciplinary activities and interests. In particular, evidence of ability and experience in effectively establishing on-going support for industry-academia engagement, collaboration and partnership, including the ability to develop and implement strategies to transform research and education outcomes into commercial or outreach applications.

7. An outstanding track record of independent and collaboration-based contributions, relative to opportunity, to their field of research, as evidenced by high impact outputs in relevant and leading venues; a record of developing and maintaining collaborations with world-leading practitioners, researchers, institutes and non- academic partners; and by other measures such as prestigious awards (professional, research, teaching, etc.), keynote addresses at leading conferences, elite membership of professional institutes, patents, exhibits, broadcasts, entrepreneurship, major policy or community work, etc.

8. An extensive record of leading and winning bids for external funding to support individual and collaborative research, education and engagement activities, and the ability to identify similar opportunities for others to pursue and to provide mentoring in the process.

9. Demonstrated capacity to effectively support the management of a research facility by setting a strategic vision, clear research directions, budgets and goals for all staff/students, driving domestic and international collaboration at the highest level that ensures continuity of research and field leadership positions.

10. 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. 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.

11. Proven ability to provide leadership to early and mid-career staff and 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.

12. A demonstrated high-level understanding of equal employment opportunity principles and a commitment to the application of these policies in a University context.

*Consistent with their relative opportunity to do so,* a **Level E** Academic is expected to possess advanced academic qualifications, broad expertise and deep knowledge in the relevant discipline area, and in this case, demonstrated capability to work beyond their own domains. They are expected to possess leadership skills in order to foster excellence in that field of education, research and engagement within the university, the discipline and/or the profession and within the scholarly and/or general community, and experience in directing significant research groups, either in academia, industry or government.

*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.*

| Supervisor/Delegate Signature: | | Date: | |
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| Printed Name: | | Uni ID: | |

| References: |
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| Professional Staff Classification Descriptors |
| Academic Minimum Standards |
| CECS Strategic Intent (2021) |
| CECS Academic Performance Standards |