



Australian
National
University



INFORMATION FOR CANDIDATES
ASSOCIATE PROFESSOR / PROFESSOR
APPOINTMENTS

SECURE HARDWARE
AND SOFTWARE SYSTEMS

Closing Date: Friday 26 October 2018

ANU College of
Engineering &
Computer Science

CONTENTS

Message from the Vice Chancellor	2
Message from the College Dean	3
About Us	
The scale of the opportunity and where to begin	5
Our global reach	6
3A Institute	7
Our values and our support for you	8
About you	
Your area of expertise	10
Your unique contribution	11
Your approach	12
The formal bit	
Professional and personal attributes	14
How to apply	15
What life will be like	
The Canberra advantage	17
Testimonials from current staff	18
Employee benefits	19
World leading university	20



MESSAGE FROM THE VICE CHANCELLOR

“Contemporary ANU will sit among the great universities of the world...We will be renowned for the excellence of our research...Our research investment will be strategic, taking a long-term view and focus on high-quality activities, high-impact infrastructure and areas of high national importance. We will be renowned for the quality of our undergraduate and graduate education. We will be renowned for the quality of contribution that our research and education make to societal transformation. We will identify emerging areas of need for the nation and provide research and education that will equip Australia to cope with challenges not yet imagined. ANU ... will change Australia and change the world. It will have impact.”

ANU Strategic Plan 2018-2021

For more than 70 years, The Australian National University has worked to realise the ambitions of the visionary Australians who founded it. As our Strategic Plan reflects, our ambition for the future of ANU is as great as the ambition of our founders, and reflects the special national responsibilities we have as beneficiary of the National Institutes Grant.

Our journey so far has validated their courage and vision. Our distinctive research culture is renowned: of the seven Nobel Prizes awarded for work undertaken in Australia, ANU can claim four. We rank among the world's very finest universities. While our focus is Australia, our horizons are global. The legacy of our long-standing international engagement and expertise has delivered us unrivalled impact beyond our borders, particularly throughout Asia and the Pacific.



Australia today is in an era of rapid transition, along with the rest of the world. We face economic and societal change, and international instability. Government, industry and social institutions all face challenges to their legitimacy and longevity. In response, ANU must innovate in research, teaching and learning, and elevate our understanding of contemporary Australia and our world.

To fulfil our mandate as Australia's national university, we must invest in, and insist on, excellence everywhere at ANU. We must be ready to adapt what we do and how we do it wherever our performance is not the best it can be. We must dismantle all the barriers, real and perceived, between ANU and the society we serve. In other words, we must be a contemporary national university and a valuable global resource.

The Reimagine Project – one of the most significant strategic endeavours ANU has ever undertaken – exemplifies our ambitions. It has my full support and backing as Vice-Chancellor and will ensure this unique institution is able to deliver on its contemporary mission as Australia's national university, and one of the world's greatest. If this sounds like a place you can come and make a contribution, we would be delighted to hear from you.

Professor Brian P. Schmidt, AC FAA FRS
Vice Chancellor and President

MESSAGE FROM THE COLLEGE DEAN

The Reimagine Project: Reimagining the future of Engineering and Computing

ANU has embarked on a major initiative to reimagine the role of engineering and computing in the 21st Century. Our lived experience is increasingly one of large-scale systems of people, who's actions and interactions are influenced by our digital, physical and biological environment. We and our technology are highly interconnected and yet highly diverse. Somebody, somewhere designed, built, and operates almost everything.

Our world needs people who are experts at designing, and safely operating, the engine that is composed of all of us – our society. They will need to be expert thinkers about how to safely design and operate highly heterogeneous and interconnected systems of natural and made things, IT and people – at scale.

We will reimagine the traditional engineering and computing disciplines. We believe the role of engineers and computing experts in the 21st Century is to bring together expertise on people, technological systems and science. We will not step away from the need to master a coherent foundational body of knowledge, and we will not be confined by old disciplinary boundaries as we give shape to new bodies of knowledge. At its core, we will equip our people to ask the right kind of questions from a people-centric, technological and scientific perspective.



‘We will inspire a new generation of high-potential, creative people to come to engineering and computing with a diverse range of interests, motivations, perspectives and career aspirations.’

We will nurture those people to go out into the 21st century world to find the right kinds of problems, the solving of which are truly transformational.

We are looking for people who believe in the same things we do and who want to create something exceptional. Unlock your imagination and reach out.

Professor Elanor Huntington

Dean

ANU College of Engineering and Computer Science



ABOUT US

THE SCALE OF THE OPPORTUNITY AND WHERE TO BEGIN

The ANU College of Engineering and Computer Science has a strong international research reputation, a vibrant research led education program and has impact in the world.

The College is leading the Reimagine Project, a major strategic priority for ANU over the next decade. It is a unique opportunity to reimagine the future of Engineering and Computing in the context of our current and future society.

We will build on our proud tradition of excellence in research, and creativity in quality education to frame new thinking about, and solutions to, some of the world's most complex human and technological challenges. Through the Reimagine Project, the College of Engineering and Computer Science will grow nearly 3-fold, inspiring a new generation of creative thinkers to these areas, challenging historic biases through the inclusive environment we create together.

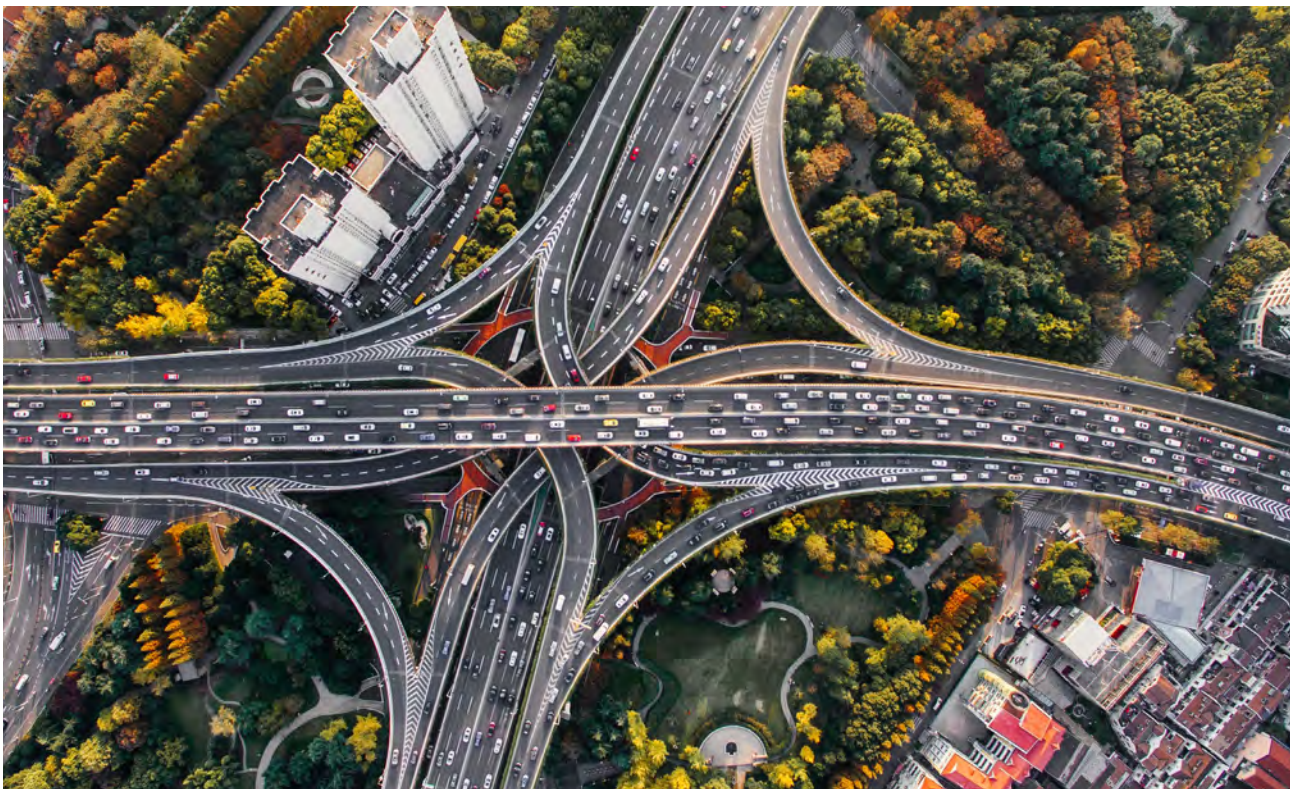
Not only are we investing in our people and students, but also in a world-class infrastructure, and ethos.

Reimagine will markedly transform the physical and digital environment, research, learning and collaboration spaces on campus.

We do not underestimate the scale or complexity of our ambition. We are fully aware that tripling the size of Engineering and Computing in a world-leading university – in order to completely reorientate and Reimagine the future of these disciplines – is a unique undertaking. Our hope is that you will share our passion, drive and commitment and join us to realise this incredible undertaking.

One of the most exciting elements of this opportunity for the right candidate will be joining at the very early stages of this endeavour with the chance to shape every aspect of the environment from the physical infrastructure right through to our culture and ethos. Nothing is ever a blank sheet of paper but this is a unique opportunity to get very close to just that – and with the support and backing of a fully committed, world-leading research university around you. We have the strategic and financial backing of this great university and we are ready to launch.

cecs.anu.edu.au/reimagine



OUR GLOBAL REACH

You'll join an esteemed group of partners with connections across the globe including partner universities, research collaborations and industry leaders.



Collaborative industry connections across the globe

Boeing - Seattle, USA
Intel - Santa Clara California, USA
Ford Motor Company - Melbourne
Google - Menlo Park California, USA
GHD - Canberra Office
Commonwealth Bank - Sydney
Airbus - Toulouse, France
Mitre Corporation - Massachusetts, USA
Sony - Tokyo, Japan
Facebook - USA
Australian Signals Directorate - Canberra
Australian Taxation Office (ATO) - Canberra
Austrac - Canberra
Australian Securities and Investments Commission (ASIC) - Canberra
Australian Institute of Health and Welfare - Canberra
ACT Government - Canberra

Engineers Without Borders (EWB) projects

Nepal
India
Cambodia
Malaysia

Example collaborator universities

Harvard - Cambridge, Massachusetts, USA
Caltech- Pasadena, California, USA
University College London - London, UK
University of Waterloo - Canada
Technical University of Munich (TUM) - Germany
City University - Hong Kong
Peking University - China
Nanyang Technological University - Singapore

3A INSTITUTE IN FOCUS



Artificial Intelligence technologies are rapidly converging into cyber-physical systems, bringing profound, global economic, social and cultural shifts.

The Autonomy, Agency and Assurance Innovation Institute (3A Institute) is the first of the Innovation Institutes, established to tackle challenges like these head on as we seek solutions to the world's most complex challenges through the Reimagine Project. Its mission is to create a new applied science to critically examine and manage cyber-physical systems through the life-cycle from design to deployment to de-commissioning.

- > The 3A Institute was established by ANU Professor Genevieve Bell, one of the world's leading technologists and Senior Fellow at Intel Corporation. Professor Bell pioneered futurist research at Intel and as Director is leading the innovation, research and policy agenda of the Institute.
- > By 2020, the 3A Institute aims to have created a new intellectual framework combining both theory and praxis and to have built a curriculum to start training the first generation of certified practitioners of this new applied science
- > The 3A Institute highlights the direction our College is taking with the bold, leading and innovative Reimagine project.



The 3A Institute team, led by Distinguished Professor Genevieve Bell (centre)

OUR VALUES AND SUPPORT FOR YOU

Our commitment is to help create an environment and culture that is supportive of the most creative and imaginative ways of reframing, thinking, being and doing in order to address those highly complex human, system, digital and physical problems our society faces, including those we have not yet anticipated.

Our role is to help orchestrate new thinking and new opportunities through bringing together a wide range of expert thinkers in related areas in such a way that old boundaries fall away and new discovery happens.

We will support you in collaborative endeavour. We will support you when this gets difficult and even when it fails. We will support you when you identify gaps that we can help to fill. We will support you when you are supporting others and building capacity and teams around you. We will support you in building an inclusive, positive and supportive environment that rewards brave new ideas that break new ground.

We will define, resource and reward success for individuals and teams in creative and different ways and we will recruit to compose teams.



A full-page photograph of a park scene. In the foreground, a concrete bridge with a metal railing spans a small, rocky stream. The stream is surrounded by dense green grass and foliage. In the background, a line of tall, mature trees with vibrant green leaves stands against a bright sky. A semi-transparent white rectangular box is positioned in the upper right quadrant of the image, containing the text "ABOUT YOU" in a bold, black, sans-serif font.

ABOUT YOU

YOUR AREA OF EXPERTISE

You will have the depth of expertise and breadth of vision needed to redefine the frontiers of disciplinary knowledge as well as frame and solve important, complex, problems of the age.

To that end, and in collaboration with our colleagues from across and beyond the university, you will bring expertise from relevant areas across the breadth of engineering or computing disciplines as well as from the social sciences, humanities, natural and life sciences.

We currently have particular interest in speaking to those with expertise in **Secure Hardware and Software Systems**.

We are looking for individuals who have deep domain expertise in computer systems, more specifically in one or more of the following areas:

- > software systems security
- > computer hardware security
- > distributed systems security
- > computer platform security (cloud, mobile, IoT)
- > information security
- > application security
- > security and privacy
- > secure information flow
- > malware analysis
- > or related areas.

The ideal candidate could come from industry, government or academia. They will need to have the depth and breadth technical expertise to build research capacity in secure hardware and software systems at ANU.

We are looking for individuals who have deep domain expertise must provide both technical research and educational leadership at ANU, building teams and equipping others to expand into new areas.



YOUR UNIQUE CONTRIBUTION

- > You will be an expert thinker with deep expertise in a relevant discipline;
- > You will have the breadth of vision to bring together expertise on people, technological systems and science;
- > You will set new expectations of excellence, inspiring existing and future faculty, students and partners;
- > You will bring additional networks that can enhance and complement the development and delivery of the Reimagine project;
- > You will deliver and connect well across domains of expertise and support others in doing so;
- > You will bring a passion and expertise for new models learning and will know how to equip the next generation of engineers and computer scientists to think differently;
- > You will bring a passion and expertise for new modes of engagement beyond the academy
- > You will be a proven collaborator and team builder, supporting the success of others;
- > You will bring expertise in creating and sustaining a positive, inclusive, supportive and creative culture where failure is part of the learning experience and success is celebrated collectively;
- > You will bring leadership to the role, modelling behaviours and inspiring others.



YOUR APPROACH

- > You will be motivated by a desire to reimagine the future for Engineering and Computing; solving complex problems and making a positive difference to the world we live in;
- > You will be a divergent thinker with deep domain expertise;
- > You will be purpose-driven, want to keep learning and will bring your whole self to achieving team success;
- > You will do things differently as much as you will do different things and you will understand why this is as much about outlook and behavioural attributes as it is about domains of expertise;
- > You will understand why diversity is essential to creativity and will model a truly inclusive approach to others;
- > You will model high levels of integrity in all your interactions;
- > You will be brave, resilient, and accepting of failure in yourself and others;
- > You will be an outstanding and inspiring communicator, including embracing new forms of communication and social media.



THE FORMAL BIT



PROFESSIONAL AND PERSONAL ATTRIBUTES

You will have:

- > Proven domain expertise in a relevant research area (a record of world-leading research would be an advantage but is not a necessity if your academic career and contributions taken a different route);
- > Proven ability to set a positive, creative and inclusive culture along with both behavioural and performance expectations;
- > Expertise in new models of learning and engagement that will support future engineers and computer scientists to think differently.

You will be:

- > Purpose-driven with a desire to reimagine the future of engineering and computer science;
- > A divergent thinker with proven impact on a complex problem;
- > A natural collaborator, able to deliver and connect across domains of expertise with existing networks in place;
- > A natural leader and outstanding communicator;
- > Brave, resilient, creative, inspiring, inclusive, energising, positive, honest and generous.



HOW TO APPLY

We're keen for you to have the chance to demonstrate both the impact of your research and your enthusiasm for joining us in Reimagining the future of Engineering and Computer Science.

Please prepare the following application material:

1. Your CV (non-academic and non-traditional CVs are welcome)
2. A short cover letter explaining how you want to contribute to the Reimagine Project with consideration to the Selection Criteria.
3. Evidence of the impact of your portfolio of work, which may include research, course facilitation and outreach (this can be in case-study form)
4. A written reference from an external party who can describe the impact of your research

More information

Professor of Secure Hardware and Software Systems

For further information or to apply, please go to www.perrettlaver.com/candidates and quote reference number **3722-2**.

Or for a confidential discussion about the role, please contact:

Daniel Flynn at daniel.flynn@perrettlaver.com or on +61 2 8354 4000

Deadline for applications:

Friday 26th October at midnight AEDT.

The Position Description contains detailed information about the role, including Key Accountability Areas, the role Statement and Selection Criteria.

ANU values diversity and inclusion and believes employment opportunities must not be limited by socio-economic background, race, religion or gender.

For more information about staff equity at ANU, visit: services.anu.edu.au/human-resources/respect-inclusion

Protecting your personal data is of the utmost importance to Perrett Laver and we take this responsibility very seriously. Any information obtained by our trading divisions is held and processed in accordance with the relevant data protection legislation. The data you provide us with is securely stored on our computerised database and transferred to our clients for the purposes of presenting you as a candidate and/or considering your suitability for a role you have registered interest in.

As defined under the General Data Protection Regulation (GDPR) Perrett Laver is a Data Controller and a Data Processor, and our legal basis for processing your personal data is 'Legitimate Interest'. You have the right to object to us processing your data in this way. For more information about this, your rights, and our approach to Data Protection and Privacy, please visit our website perrettlaver.com/information/privacy-policy



WHAT LIFE WILL BE LIKE

THE CANBERRA ADVANTAGE

Canberra has the power to surprise, with its abundance of fine food, wine, art, culture, ideas and innovation. As an evolving city, this element of surprise continues even once you've made Canberra your home, with new developments, events and opportunities constantly emerging to keep life interesting.

Proximity to power and policy

Our unique location in Canberra creates an enriched teaching and research environment, giving our researchers and students access to the nation's political and policy making community.



A unique environment with unrivalled access

Our healthy appetite for outdoor pursuits is enhanced by the natural resources available: from sailing on Lake Burley Griffin, mountain biking at the world class Mount Stromlo facility or heading up to the Snowy Mountains for a day on the slopes or down to the spectacular beaches of the NSW South Coast.

We are also home to most of Australia's major national cultural institutions, with whom the University has a close relationship, and a cultural calendar overflowing with international exhibitions, arts festivals and entertainment.

World leading quality of Life

Canberra is designed to maximise the quality of life, built on a blueprint that connects people with community and nature, Canberra provides you the opportunity to create a unique work/life balance, wherever you choose to live. Rated #3 in Lonely Planet's 'Best in Travel' (2018), the best city in the world for well-being (OECD 2014) and top 25 in the world by QS Best Student Cities (2017), living in Canberra means you'll enjoy a high quality of life in a city with one of the best educated workforces, highest average full-time income and lowest unemployment rate in Australia.

For more information about life in Canberra: visitcanberra.com.au



3
hours


to Sydney

2.5
hours


to the snow

2
hours


to NSW
beaches

TESTIMONY FROM CURRENT STAFF



Dr Elizabeth Williams

Research Fellow
Autonomy, Agency and Assurance Institute

I was attracted to the 3A Institute because of the opportunity to help create a new applied science that might directly and positively impact humanity. I've been working in the Institute since April 2018, and I feel like my colleagues and I on the research team are already making steps towards achieving this goal. It's been an incredible experience thus far. I love working in an interdisciplinary team -- we all bring very different backgrounds and perspectives to each research question, which means we're all learning, questioning every assumption, and coming up with interesting new ideas on a daily basis. More broadly, I really enjoy being part of the campus community -- the students are diverse and highly motivated, campus is vibrant, and home is a short and lovely bike ride away.

Associate Professor Antonio Tricoli

ARC DECRA, WESTPAC, FERL Fellow
ANU College of Engineering and Computer Science

Since I have been selected as a recipient for a FERL fellowship at the Research School of Engineering (ANU), I had the opportunity to experience a stimulating and rapidly growing research environment. The unique freedom, autonomy and mentoring offered with this position are a great asset that has greatly contributed with my personal and academic development. I have greatly appreciated the welcoming research culture and mindset that are a substantial support toward the achievement of any ambitious goals.



Dr Lesley Seebeck

CEO
ANU Cyber Institute

I was pleased and excited to be offered this opportunity—both to be at the Australian National University, Australia's premier research university, and to help build national capability in such a key area of Australia's future.

Cyber security is a field that sits at the intersection of people, technology, organisation, society, economics and security. The Cyber Institute offers the opportunity to bring people and ideas together from across a wide range of disciplines, backgrounds and endeavours to drive innovation, meet immediate needs and shape how we, as a nation, position ourselves for the future.

Associate Professor Stephen Gould

Ongoing Position (OP) Program 2010

When returning to Australia in 2010, I was looking for an academic research environment that encouraged research excellence, collaboration, and exposure to top quality students. I found that at the Research School of Computer Science at the ANU and its close ties with NICTA (now Data61). ANU has been a place where I can focus on building world-class research with my peers, engage with other academic and industry partners, and develop innovative teaching programs to motivate and excite some of the best students in the world. The informal mentoring that I have received from senior academics and support from the College leadership has been invaluable in allowing me to win numerous competitive grants and industry research contracts. And while Canberra may seem a long way from the rest of the world, the generous travel grants and reduced teaching load in my first few years allowed me to stay close to international colleagues. Looking back, I am confident that I have chosen the right place to build my research career at one of the world's top universities.

EMPLOYEE BENEFITS

The Australian National University provides a number of employee benefits for eligible employees.

Below is a brief summary of the benefits the ANU provides for eligible employees, which begin from the commencement of their appointment.

Family Friendly Workplace

- > Generous parental leave provisions – up to 26 weeks at full pay plus 6 weeks of career re-entry leave
- > On-campus childcare with the option to deduct payment from pre-tax salary
- > Flexible working arrangements
- > Breast feeding facilities
- > Dual career (spousal) hires

Career and Professional Development

- > In-house and external staff development opportunities, including individual coaching programme
- > Support for caring responsibility to attend conference/seminar
- > Outside Studies Program
- > Support for individual career planning/counselling services
- > Staff undergraduate and postgraduate scholarships
- > Career development leave program
- > Informal and formal mentoring

Salary Packaging

- > Novated (car) leases
- > Airline Membership – Qantas and Virgin Australia
- > Laptops, PDAs
- > Parking – Eligible staff are able to apply for permits for on-campus parking
- > Superannuation

Health and Wellbeing

- > On-campus staff counselling service
- > Independent and confidential Employee Assistance Program
- > On-campus fully credited primary health care facility – free flu vaccination
- > ANU Fitness Centre – gym and group fitness classes
- > Wellbeing programs for staff e.g. Women and Men's Health Checks
- > Dedicated Work Environment Group to support staff with Work, Health and Safety matters

Campus Life and Facilities

- > Cafes, banks, ATMs, chemist, newsagent, bookshop and a post office
- > ANU is a Smoke-Free Campus
- > Access to University Libraries – 5 in total
- > ANU GreenShare Car service
- > Campus Bicycle Fleet and a network of walking and bike paths around campus
- > ANU Green Unit to help reduce our carbon footprint
- > Corporate discount for rental cars
- > Vehicle Servicing and Maintenance with Autoco Belconnen –free pick up and drop off from the ANU
- > Well established and maintained precincts for acoustic and other events e.g. University House, Llewellyn Hall
- > Well maintained gardens and sporting/recreation facilities

Salary and Rewards

- > Contribution of up to 17% superannuation (in addition to base salary)
- > On-campus Unisuper consultant available for general advice on superannuation
- > ANU staff health insurance plan with HCF for Australian resident and non-resident staff
- > Recognition of Prior Service with another Australian university or Commonwealth authority

Learning communities

- > Student-led organisations inclusive and open to everyone. These communities encompasses areas such as:
 - Creative arts;
 - Cultures;
 - Global challenges
 - History; and
 - Sustainability

For additional information, please contact
The College of Engineering and Computer Science
Human Resources
E hr.cecs@anu.edu.au

A WORLD-LEADING UNIVERSITY

The Australian National University (ANU) is one of the world's foremost research universities.

Distinguished by its relentless pursuit of excellence, the University attracts leading academics and outstanding students from Australia and around the world.

Further information about ANU can be found at:
anu.edu.au/about

History

The University was established by the Commonwealth Parliament in 1946 specifically to lead the development of the intellectual capacity of the nation through research and research training in line with the best international standards. It is the only Australian university established by a Commonwealth Act of Parliament. In 1960, the University accepted responsibility for undergraduate education along with an expectation that the highest standards of education would be achieved.

Scale

The University has 4,300 staff, 10,286 undergraduates and 6,925 postgraduate students. Its annual revenue exceeds \$1.0 billion and consolidated assets are worth \$2.5 billion

Partnerships

The University has strong links with leading research institutions in Australia and overseas. It is a founding member of the International Alliance of Research Universities, a co-operative network of 10 eminent international research-intensive universities which includes:

- > University of Cambridge
- > University of Oxford
- > University of California, Berkeley
- > Yale University
- > Peking University
- > National University of Singapore
- > University of Tokyo
- > University of Copenhagen
- > ETH Zurich

Research-intensive education

As the specially-chartered national university, the University conducts research at the highest levels in all of its colleges, and offers a unique research-led education to undergraduate and postgraduate students as well as postdoctoral fellows.

The University advances the national intellectual and creative capacity in three key ways:

1. Through broad-based research and research-intensive education in the disciplines fundamental to all knowledge: the humanities, the sciences and the social sciences,
2. By supporting research and research-intensive education in a spectrum of professional disciplines, and
3. By studying Australia in its various contexts.

It is the aim of the University to achieve its objectives by creating an inspirational working environment for all its staff, students and visitors.

In each of its endeavours, the University strives to achieve at the levels of the world's great universities.

Location

The University campus has over 200 buildings and occupies 145 hectares adjacent to the city centre of Canberra. The University also has a number of smaller campuses:

- > Mount Stromlo Observatory (west of Canberra)
- > Siding Spring Observatory (near Coonabarabran, western New South Wales)
- > North Australia Research Unit (Darwin, Northern Territory)
- > Kioloa (coastal campus near Bawley Point, on the New South Wales South Coast)
- > ANU Medical School – The Canberra Hospital campus
- > ANU Medical School – Calvary Hospital
- > Health Facilities in South East New South Wales

The Australian National University,
Canberra ACT 2600 Australia

CRICOS Provider #00120C



Position Description

College / Division:	College of Engineering & Computer Science
Position Title:	Associate Professor/Professor
Classification:	Academic Level D/E
Responsible to:	Deputy Dean

PURPOSE STATEMENT:

The ANU College of Engineering and Computer Science is dedicated to contributing to The Australian National University's reputation for excellence in research and research-led education, bringing together expertise across a range of areas to reimagine the role of engineering and computing for future generations.

This position is to support the College Dean to shape an agenda to transform the way science and technology are integrated with communities and society in the 21st century. This includes reimagining the physical environment, research, teaching and collaborative spaces on campus, helping us to create an inviting and cohesive College precinct for our staff and students

KEY ACCOUNTABILITY AREAS:

About the Reimagine Project:

The Dean of the ANU College of Engineering and Computer Science is leading the Reimagine Project, a new type of engineering and computing, one that is custom built and fit for the middle of the 21st century. This is an interdisciplinary venture, with the aim to attract the very best and brightest from around the world to find and solve problems – not just engineers or computer scientists but the brightest minds both from industry and academia, with varied backgrounds and areas of expertise.

The purpose of this appointment is to:

- Support the establishment of an innovative, interdisciplinary, outwardly-focused research program;
- 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 modern, unique programs that are globally relevant to equip our students with diverse and multidisciplinary skills.

Position Dimension & Relationships:

The position will be accountable to the Deputy Dean, working in close collaboration with the College Dean, industry, government and other academic and professional staff across the University.

As a senior academic, the role involves the conduct of independent and/or team research activities at the highest international level in a highly diverse and collaborative environment; strong contributions to teaching and learning at both postgraduate and undergraduate levels; a commitment to the effective administration of the College; and a strong engagement in cross discipline studies within the College and the broader University environment, to integrate efforts and build critical mass in progressing the agenda of the Reimagine Project.

The staff member is expected to contribute cooperatively to the overall intellectual life of the College and University.

Role Statement:

Academic Level D

Specific duties required of a **Level D Academic** may include:

1. Undertake high impact independent research activities in the area of secure hardware and software systems or a related area in alignment to the strategies of the Reimagine Project.
2. Significant involvement in the sharing of this new body of knowledge through Technology and/or a combination of these research areas that are strategically complementary to the existing expertise of the College with a view to publishing original, innovative and multi-disciplinary results in international refereed

journals, present research at academic seminars and at a national and international conferences, and collaborate with other researchers at an international level.

3. In collaboration with senior academics, hold a key role in seeking and generating resources to support the development of deep and transformational disciplinary expertise to round out into core engineering and computing areas, through engagements with a range of funding bodies and also through the preparation of a combination of multi-party collaborative research proposals such as the Australian Research Council (ARC), industry funds and approved consultancy arrangements. Where appropriate, oversee the financial management of grants received for research projects.
4. Establish and maintain relationships with industry, government and the wider research community to enhance cross-disciplinary collaborations and support the translation of research outcomes into applications.
5. Make a strong contribution to the teaching activities of the College at the undergraduate and graduate levels. This includes, but is not limited to, course coordination including the development of and responsibility for curriculum/programs of study.
6. Supervise students working on individual or group projects at undergraduate, honours, graduate-coursework levels. Supervision of research students.
7. Manage and provide leadership through team development, mentoring and career development of less senior academic in alignment with the performance development process at the ANU.
8. Proactively contribute to all aspects of the operational of the College and University and assist in outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
9. Lead and initiate community outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
10. Maintain and actively promote high academic standards in all education, research and administration endeavours.
11. Take responsibility for their own workplace health and safety and not wilfully place at risk the health and safety of another person in the workplace.
12. Other duties as required consistent with the classification level of the position.

Academic Level E

In their role as ANU academic level E the appointee will be expected to:

1. Undertake and foster high impact independent research in the area of secure hardware and software systems or a related area in alignment to the strategies of the Reimagine Project
2. High level involvement in the sharing of new body of knowledge through Technology and/or a combination of these research areas that are strategically complementary to the existing expertise of the College with a view to publishing original, innovative and multi-disciplinary results in international refereed journals, present research at academic seminars and at prestigious national and international conferences, and collaborate with other researchers at an international level.
3. Take a lead role in seeking and generating resources to support the building of the new applied science through engagements with a range of funding bodies through the preparation of a combination of multi-party collaborative research proposals such as the Australian Research Council (ARC), industry funds and approved consultancy arrangements.
4. Make a distinguished contribution to the teaching activities of the College at the undergraduate and graduate levels. This includes, but is not limited to, taking a leadership role in curriculum design and review, design and implementation of innovative pedagogy, and establishment of degree programs in collaboration with colleagues.
5. Supervise students working on individual or group projects at undergraduate, honours, graduate-coursework levels. Supervision of research students.
6. Lead, supervise and develop less senior academic and research support staff in the School. . Providing leadership, 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 College and University more broadly. This may include taking on leadership and broad supervisory roles.
8. Lead and initiate community outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
9. Maintain and actively promote high academic standards in all education, research and administration endeavours undertaken by the College and the University.
10. 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.

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

SELECTION CRITERIA:

Academic Level D:

1. A PhD or equivalent that is relevant to secure hardware and software systems or a related area, with a strong track record of independent research as evidenced by high impact research outputs in industry, government or academic environments.
2. Proven capacity to contribute to the strategic priorities and activities of the Reimagine project, including a commitment to enhancing diversity.
3. A strong orientation to collaborative research, team-based projects and interdisciplinary activities and interests.
4. A strong record of leading and winning bids for external funding (if relevant in your industry) to support individual and collaborative research activities, and the ability to identify similar opportunities for others to pursue and to provide mentoring in the process.
5. Outstanding communication skills with the ability to inspire a wide range of audiences, including in a cross-disciplinary areas and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
6. Evidence of effective teaching, training or mentoring (if relevant in your industry) and of the ability to contribute significantly to setting the education agenda of the College.
7. Capacity to foster graduate student education and inspire undergraduate students along with a commitment to outreach activities involving the general community, schools, public sector, industry and the wider research community.
8. Ability to provide leadership to early-career researchers 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
9. A demonstrated high-level understanding of diversity and inclusion principles and a commitment to the application of these policies in a University context.

*Consistent with their relative to opportunity to do so, A **Level D Academic** will normally have a relevant doctoral qualification or equivalent accreditation and standing together with subsequent research experience. This may not apply to candidates coming from different fields such as industry or government. Once in the role, there will be an expectation of academic excellence, making an outstanding contribution to research and, in this particular position, the ability to collaborate with internal and external stakeholders outside of your domain*

A position at this level will require a demonstrated strong record of research output in academia, industry or government in secure hardware and software systems.

Academic Level E:

1. A PhD or equivalent that is relevant to secure hardware and software systems, or a related area, with an outstanding track record of independent research as evidenced by high impact research outputs in industry, government or academic environments.
2. Proven capacity to contribute to the strategic priorities and activities of the Reimagine project, including a commitment to enhancing diversity.
3. Highly demonstrated orientation to collaborative research, team based projects and interdisciplinary activities and interests.
4. An extensive record of leading and winning bids for external funding (if relevant to your industry) to support individual and collaborative research activities, and the ability to identify similar opportunities for others to pursue and to provide mentoring in the process.
5. 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.
6. Excellent oral and written English language skills and a demonstrated ability to inspire a wide range of audiences, including in a cross-disciplinary areas and to foster respectful and productive working relationships with staff, students and colleagues at all levels.

7. The ability to make a strategic and significant contribution to the education agenda of the College and, where appropriate to your industry, evidence of outstanding teaching at all levels.
8. Highly demonstrated capacity to foster graduate student education and inspire undergraduate students along with a commitment to outreach activities involving the general community, schools, public sector, industry and the wider research community
9. Proven ability to provide leadership to early and mid-career researchers 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
10. A demonstrated high-level understanding of equal employment opportunities principles and a commitment to the application of these policies in a University context.

Consistent with their relative opportunity to do so, a **Professor** 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. Academic positions are expected to possess leadership skills in order to foster excellence in that field of research within the university, the discipline and/or the profession and within the scholarly and/or general community. Experience in directing significant research groups, either in academia, industry or government in secure hardware and software systems is also expected.

Supervisor Signature:		Date:	
Printed Name:		Uni ID:	

References:Academic Minimum Standards



Australian
National
University



INFORMATION FOR CANDIDATES
ASSOCIATE PROFESSOR / PROFESSOR
APPOINTMENTS

SPACE ENGINEERING

Closing Date: Friday 26 October 2018

ANU College of
Engineering &
Computer Science

CONTENTS

Message from the Vice Chancellor	2
Message from the College Dean	3
About Us	
The scale of the opportunity and where to begin	5
Our global reach	6
3A Institute	7
Our values and our support for you	8
About you	
Your area of expertise	10
Your unique contribution	11
Your approach	12
The formal bit	
Professional and personal attributes	14
How to apply	15
What life will be like	
The Canberra advantage	17
Testimonials from current staff	18
Employee benefits	19
World leading university	20



MESSAGE FROM THE VICE CHANCELLOR

“Contemporary ANU will sit among the great universities of the world...We will be renowned for the excellence of our research...Our research investment will be strategic, taking a long-term view and focus on high-quality activities, high-impact infrastructure and areas of high national importance. We will be renowned for the quality of our undergraduate and graduate education. We will be renowned for the quality of contribution that our research and education make to societal transformation. We will identify emerging areas of need for the nation and provide research and education that will equip Australia to cope with challenges not yet imagined. ANU ... will change Australia and change the world. It will have impact.”

ANU Strategic Plan 2018-2021

For more than 70 years, The Australian National University has worked to realise the ambitions of the visionary Australians who founded it. As our Strategic Plan reflects, our ambition for the future of ANU is as great as the ambition of our founders, and reflects the special national responsibilities we have as beneficiary of the National Institutes Grant.

Our journey so far has validated their courage and vision. Our distinctive research culture is renowned: of the seven Nobel Prizes awarded for work undertaken in Australia, ANU can claim four. We rank among the world's very finest universities. While our focus is Australia, our horizons are global. The legacy of our long-standing international engagement and expertise has delivered us unrivalled impact beyond our borders, particularly throughout Asia and the Pacific.



Australia today is in an era of rapid transition, along with the rest of the world. We face economic and societal change, and international instability. Government, industry and social institutions all face challenges to their legitimacy and longevity. In response, ANU must innovate in research, teaching and learning, and elevate our understanding of contemporary Australia and our world.

To fulfil our mandate as Australia's national university, we must invest in, and insist on, excellence everywhere at ANU. We must be ready to adapt what we do and how we do it wherever our performance is not the best it can be. We must dismantle all the barriers, real and perceived, between ANU and the society we serve. In other words, we must be a contemporary national university and a valuable global resource.

The Reimagine Project – one of the most significant strategic endeavours ANU has ever undertaken – exemplifies our ambitions. It has my full support and backing as Vice-Chancellor and will ensure this unique institution is able to deliver on its contemporary mission as Australia's national university, and one of the world's greatest. If this sounds like a place you can come and make a contribution, we would be delighted to hear from you.

Professor Brian P. Schmidt, AC FAA FRS
Vice Chancellor and President

MESSAGE FROM THE COLLEGE DEAN

The Reimagine Project: Reimagining the future of Engineering and Computing

ANU has embarked on a major initiative to reimagine the role of engineering and computing in the 21st Century. Our lived experience is increasingly one of large-scale systems of people, who's actions and interactions are influenced by our digital, physical and biological environment. We and our technology are highly interconnected and yet highly diverse. Somebody, somewhere designed, built, and operates almost everything.

Our world needs people who are experts at designing, and safely operating, the engine that is composed of all of us – our society. They will need to be expert thinkers about how to safely design and operate highly heterogeneous and interconnected systems of natural and made things, IT and people – at scale.

We will reimagine the traditional engineering and computing disciplines. We believe the role of engineers and computing experts in the 21st Century is to bring together expertise on people, technological systems and science. We will not step away from the need to master a coherent foundational body of knowledge, and we will not be confined by old disciplinary boundaries as we give shape to new bodies of knowledge. At its core, we will equip our people to ask the right kind of questions from a people-centric, technological and scientific perspective.



‘We will inspire a new generation of high-potential, creative people to come to engineering and computing with a diverse range of interests, motivations, perspectives and career aspirations.’

We will nurture those people to go out into the 21st century world to find the right kinds of problems, the solving of which are truly transformational.

We are looking for people who believe in the same things we do and who want to create something exceptional. Unlock your imagination and reach out.

Professor Elanor Huntington

Dean

ANU College of Engineering and Computer Science



ABOUT US

THE SCALE OF THE OPPORTUNITY AND WHERE TO BEGIN

The ANU College of Engineering and Computer Science has a strong international research reputation, a vibrant research led education program and has impact in the world.

The College is leading the Reimagine Project, a major strategic priority for ANU over the next decade. It is a unique opportunity to reimagine the future of Engineering and Computing in the context of our current and future society.

We will build on our proud tradition of excellence in research, and creativity in quality education to frame new thinking about, and solutions to, some of the world's most complex human and technological challenges. Through the Reimagine Project, the College of Engineering and Computer Science will grow nearly 3-fold, inspiring a new generation of creative thinkers to these areas, challenging historic biases through the inclusive environment we create together.

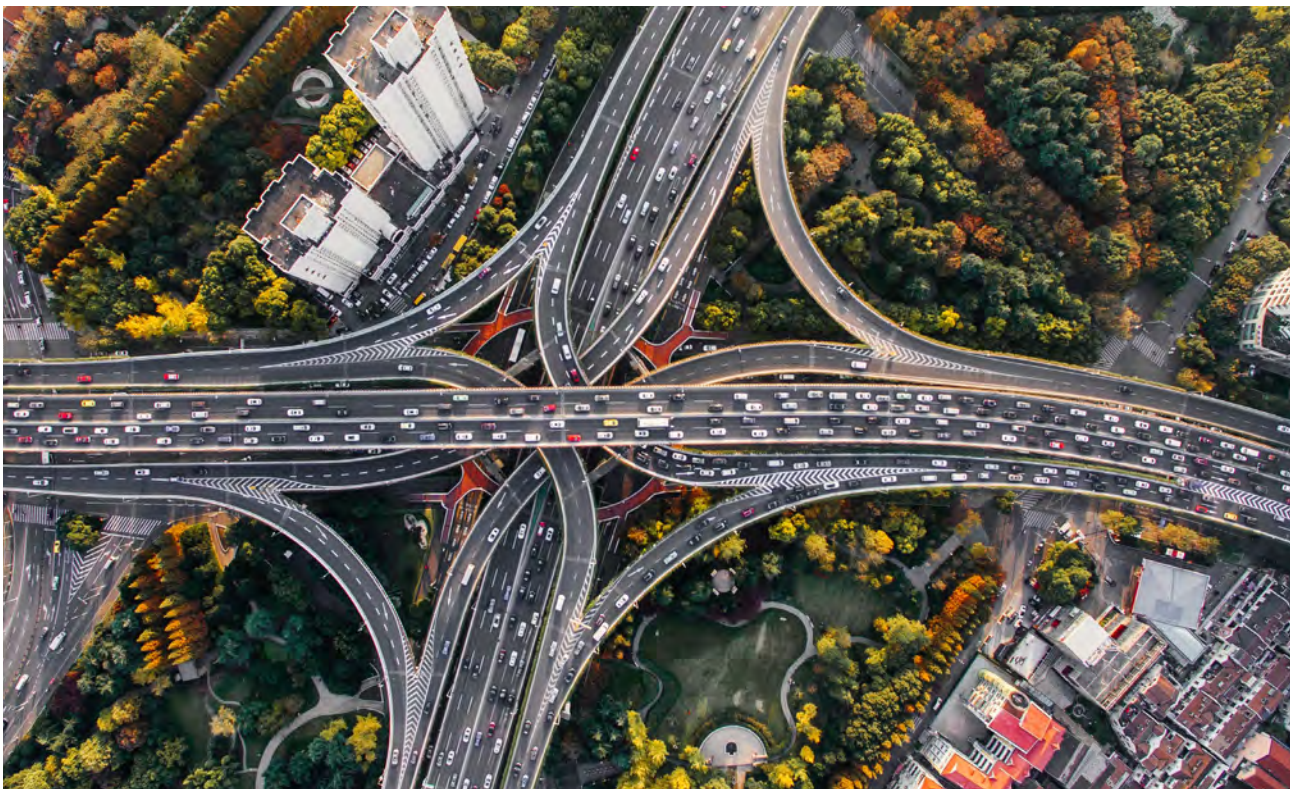
Not only are we investing in our people and students, but also in a world-class infrastructure, and ethos.

Reimagine will markedly transform the physical and digital environment, research, learning and collaboration spaces on campus.

We do not underestimate the scale or complexity of our ambition. We are fully aware that tripling the size of Engineering and Computing in a world-leading university – in order to completely reorientate and Reimagine the future of these disciplines – is a unique undertaking. Our hope is that you will share our passion, drive and commitment and join us to realise this incredible undertaking.

One of the most exciting elements of this opportunity for the right candidate will be joining at the very early stages of this endeavour with the chance to shape every aspect of the environment from the physical infrastructure right through to our culture and ethos. Nothing is ever a blank sheet of paper but this is a unique opportunity to get very close to just that – and with the support and backing of a fully committed, world-leading research university around you. We have the strategic and financial backing of this great university and we are ready to launch.

cecs.anu.edu.au/reimagine



OUR GLOBAL REACH

You'll join an esteemed group of partners with connections across the globe including partner universities, research collaborations and industry leaders.



Collaborative industry connections across the globe

Boeing - Seattle, USA
Intel - Santa Clara California, USA
Ford Motor Company - Melbourne
Google - Menlo Park California, USA
GHD - Canberra Office
Commonwealth Bank - Sydney
Airbus - Toulouse, France
Mitre Corporation - Massachusetts, USA
Sony - Tokyo, Japan
Facebook - USA
Australian Signals Directorate - Canberra
Australian Taxation Office (ATO) - Canberra
Austrac - Canberra
Australian Securities and Investments Commission (ASIC) - Canberra
Australian Institute of Health and Welfare - Canberra
ACT Government - Canberra

Engineers Without Borders (EWB) projects

Nepal
India
Cambodia
Malaysia

Example collaborator universities

Harvard - Cambridge, Massachusetts, USA
Caltech- Pasadena, California, USA
University College London - London, UK
University of Waterloo - Canada
Technical University of Munich (TUM) - Germany
City University - Hong Kong
Peking University - China
Nanyang Technological University - Singapore

3A INSTITUTE IN FOCUS



Artificial Intelligence technologies are rapidly converging into cyber-physical systems, bringing profound, global economic, social and cultural shifts.

The Autonomy, Agency and Assurance Innovation Institute (3A Institute) is the first of the Innovation Institutes, established to tackle challenges like these head on as we seek solutions to the world's most complex challenges through the Reimagine Project. Its mission is to create a new applied science to critically examine and manage cyber-physical systems through the life-cycle from design to deployment to de-commissioning.

- > The 3A Institute was established by ANU Professor Genevieve Bell, one of the world's leading technologists and Senior Fellow at Intel Corporation. Professor Bell pioneered futurist research at Intel and as Director is leading the innovation, research and policy agenda of the Institute.
- > By 2020, the 3A Institute aims to have created a new intellectual framework combining both theory and praxis and to have built a curriculum to start training the first generation of certified practitioners of this new applied science
- > The 3A Institute highlights the direction our College is taking with the bold, leading and innovative Reimagine project.



The 3A Institute team, led by Distinguished Professor Genevieve Bell (centre)

OUR VALUES AND SUPPORT FOR YOU

Our commitment is to help create an environment and culture that is supportive of the most creative and imaginative ways of reframing, thinking, being and doing in order to address those highly complex human, system, digital and physical problems our society faces, including those we have not yet anticipated.

Our role is to help orchestrate new thinking and new opportunities through bringing together a wide range of expert thinkers in related areas in such a way that old boundaries fall away and new discovery happens.

We will support you in collaborative endeavour. We will support you when this gets difficult and even when it fails. We will support you when you identify gaps that we can help to fill. We will support you when you are supporting others and building capacity and teams around you. We will support you in building an inclusive, positive and supportive environment that rewards brave new ideas that break new ground.

We will define, resource and reward success for individuals and teams in creative and different ways and we will recruit to compose teams.



A full-page photograph of a park scene. In the foreground, a concrete bridge with a metal railing spans a small, rocky stream. The stream is surrounded by dense green grass and foliage. In the background, a line of tall, mature trees with vibrant green leaves stands against a bright sky. A semi-transparent white rectangular box is positioned in the upper right quadrant of the image, containing the text "ABOUT YOU" in a bold, black, sans-serif font.

ABOUT YOU

YOUR AREA OF EXPERTISE

You will have the depth of expertise and breadth of vision needed to redefine the frontiers of disciplinary knowledge as well as frame and solve important, complex, problems of the age.

To that end, and in collaboration with our colleagues from across and beyond the university, you will bring expertise from relevant areas across the breadth of engineering or computing disciplines as well as from the social sciences, humanities, natural and life sciences.

We currently have particular interest in speaking to those with expertise in the broad area of

Space Engineering.

The ideal candidate will be at the cutting edge of expertise within the broad discipline of space engineering including (but not exclusively): space robotics; human biosphere engineering; geospatial information; system dynamics and avionics; innovative motor engineering for spaceships or related areas. The ideal candidate will have experience working in a high performing research environment - this could be in industry, government or academia.

We are looking for individuals who have deep domain expertise must provide both technical research and educational leadership at ANU, building teams and equipping others to expand into new areas.



YOUR UNIQUE CONTRIBUTION

- > You will be an expert thinker with deep expertise in a relevant discipline;
- > You will have the breadth of vision to bring together expertise on people, technological systems and science;
- > You will set new expectations of excellence, inspiring existing and future faculty, students and partners;
- > You will bring additional networks that can enhance and complement the development and delivery of the Reimagine project;
- > You will deliver and connect well across domains of expertise and support others in doing so;
- > You will bring a passion and expertise for new models learning and will know how to equip the next generation of engineers and computer scientists to think differently;
- > You will bring a passion and expertise for new modes of engagement beyond the academy
- > You will be a proven collaborator and team builder, supporting the success of others;
- > You will bring expertise in creating and sustaining a positive, inclusive, supportive and creative culture where failure is part of the learning experience and success is celebrated collectively;
- > You will bring leadership to the role, modelling behaviours and inspiring others.



YOUR APPROACH

- > You will be motivated by a desire to reimagine the future for Engineering and Computing; solving complex problems and making a positive difference to the world we live in;
- > You will be a divergent thinker with deep domain expertise;
- > You will be purpose-driven, want to keep learning and will bring your whole self to achieving team success;
- > You will do things differently as much as you will do different things and you will understand why this is as much about outlook and behavioural attributes as it is about domains of expertise;
- > You will understand why diversity is essential to creativity and will model a truly inclusive approach to others;
- > You will model high levels of integrity in all your interactions;
- > You will be brave, resilient, and accepting of failure in yourself and others;
- > You will be an outstanding and inspiring communicator, including embracing new forms of communication and social media.



An aerial photograph of a university campus during the 'golden hour' of sunset. The foreground and middle ground are filled with various university buildings, some with flat roofs and others with more complex architectural features. Numerous trees, many of which have turned bright yellow, are scattered throughout the campus. In the background, a large, forested hill rises, topped with a tall, slender telecommunications tower. To the left of the hill, a body of water is visible, and further back, a range of mountains can be seen under a clear blue sky that transitions to a warm orange glow near the horizon.

THE FORMAL BIT

PROFESSIONAL AND PERSONAL ATTRIBUTES

You will have:

- > Proven domain expertise in a relevant research area (a record of world-leading research would be an advantage but is not a necessity if your academic career and contributions taken a different route);
- > Proven ability to set a positive, creative and inclusive culture along with both behavioural and performance expectations;
- > Expertise in new models of learning and engagement that will support future engineers and computer scientists to think differently.

You will be:

- > Purpose-driven with a desire to reimagine the future of engineering and computer science;
- > A divergent thinker with proven impact on a complex problem;
- > A natural collaborator, able to deliver and connect across domains of expertise with existing networks in place;
- > A natural leader and outstanding communicator;
- > Brave, resilient, creative, inspiring, inclusive, energising, positive, honest and generous.



HOW TO APPLY

We're keen for you to have the chance to demonstrate both the impact of your research and your enthusiasm for joining us in Reimagining the future of Engineering and Computer Science.

Please prepare the following application material:

- 1.** Your CV (non-academic and non-traditional CVs are welcome)
- 2.** A short cover letter explaining how you want to contribute to the Reimagine Project with consideration to the Selection Criteria.
- 3.** Evidence of the impact of your portfolio of work, which may include research, course facilitation and outreach (this can be in case-study form)
- 4.** A written reference from an external party who can describe the impact of your research

More information

Professor of Space Engineering

For further information or to apply, please go to:
www.perrettlaver.com/candidates
and quote reference number **3722-1**.

Or for a confidential discussion about the role, please contact Joshua Herr at
joshua.herr@perrettlaver.com
or on +61 2 8354 4000.

Deadline for applications:

Friday 26th October at midnight AEDT.

The Position Description contains detailed information about the role, including Key Accountability Areas, the Role Statement and Selection Criteria.

ANU values diversity and inclusion and believes employment opportunities must not be limited by socio-economic background, race, religion or gender.

For more information about staff equity at ANU, visit: services.anu.edu.au/human-resources/respect-inclusion

Protecting your personal data is of the utmost importance to Perrett Laver and we take this responsibility very seriously. Any information obtained by our trading divisions is held and processed in accordance with the relevant data protection legislation. The data you provide us with is securely stored on our computerised database and transferred to our clients for the purposes of presenting you as a candidate and/or considering your suitability for a role you have registered interest in.

As defined under the General Data Protection Regulation (GDPR) Perrett Laver is a Data Controller and a Data Processor, and our legal basis for processing your personal data is 'Legitimate Interest'. You have the right to object to us processing your data in this way. For more information about this, your rights, and our approach to Data Protection and Privacy, please visit our website perrettlaver.com/information/privacy-policy



WHAT LIFE WILL BE LIKE

THE CANBERRA ADVANTAGE

Canberra has the power to surprise, with its abundance of fine food, wine, art, culture, ideas and innovation. As an evolving city, this element of surprise continues even once you've made Canberra your home, with new developments, events and opportunities constantly emerging to keep life interesting.

Proximity to power and policy

Our unique location in Canberra creates an enriched teaching and research environment, giving our researchers and students access to the nation's political and policy making community.



A unique environment with unrivalled access

Our healthy appetite for outdoor pursuits is enhanced by the natural resources available: from sailing on Lake Burley Griffin, mountain biking at the world class Mount Stromlo facility or heading up to the Snowy Mountains for a day on the slopes or down to the spectacular beaches of the NSW South Coast.

We are also home to most of Australia's major national cultural institutions, with whom the University has a close relationship, and a cultural calendar overflowing with international exhibitions, arts festivals and entertainment.

World leading quality of Life

Canberra is designed to maximise the quality of life, built on a blueprint that connects people with community and nature, Canberra provides you the opportunity to create a unique work/life balance, wherever you choose to live. Rated #3 in Lonely Planet's 'Best in Travel' (2018), the best city in the world for well-being (OECD 2014) and top 25 in the world by QS Best Student Cities (2017), living in Canberra means you'll enjoy a high quality of life in a city with one of the best educated workforces, highest average full-time income and lowest unemployment rate in Australia.

For more information about life in Canberra: visitcanberra.com.au



3
hours


to Sydney

2.5
hours


to the snow

2
hours


to NSW
beaches

TESTIMONY FROM CURRENT STAFF



Dr Elizabeth Williams

Research Fellow
Autonomy, Agency and Assurance Institute

I was attracted to the 3A Institute because of the opportunity to help create a new applied science that might directly and positively impact humanity. I've been working in the Institute since April 2018, and I feel like my colleagues and I on the research team are already making steps towards achieving this goal. It's been an incredible experience thus far. I love working in an interdisciplinary team -- we all bring very different backgrounds and perspectives to each research question, which means we're all learning, questioning every assumption, and coming up with interesting new ideas on a daily basis. More broadly, I really enjoy being part of the campus community -- the students are diverse and highly motivated, campus is vibrant, and home is a short and lovely bike ride away.

Associate Professor Antonio Tricoli

ARC DECRA, WESTPAC, FERL Fellow
ANU College of Engineering and Computer Science

Since I have been selected as a recipient for a FERL fellowship at the Research School of Engineering (ANU), I had the opportunity to experience a stimulating and rapidly growing research environment. The unique freedom, autonomy and mentoring offered with this position are a great asset that has greatly contributed with my personal and academic development. I have greatly appreciated the welcoming research culture and mindset that are a substantial support toward the achievement of any ambitious goals.



Dr Lesley Seebeck

CEO
ANU Cyber Institute

I was pleased and excited to be offered this opportunity—both to be at the Australian National University, Australia's premier research university, and to help build national capability in such a key area of Australia's future.

Cyber security is a field that sits at the intersection of people, technology, organisation, society, economics and security. The Cyber Institute offers the opportunity to bring people and ideas together from across a wide range of disciplines, backgrounds and endeavours to drive innovation, meet immediate needs and shape how we, as a nation, position ourselves for the future.

Associate Professor Stephen Gould

Ongoing Position (OP) Program 2010

When returning to Australia in 2010, I was looking for an academic research environment that encouraged research excellence, collaboration, and exposure to top quality students. I found that at the Research School of Computer Science at the ANU and its close ties with NICTA (now Data61). ANU has been a place where I can focus on building world-class research with my peers, engage with other academic and industry partners, and develop innovative teaching programs to motivate and excite some of the best students in the world. The informal mentoring that I have received from senior academics and support from the College leadership has been invaluable in allowing me to win numerous competitive grants and industry research contracts. And while Canberra may seem a long way from the rest of the world, the generous travel grants and reduced teaching load in my first few years allowed me to stay close to international colleagues. Looking back, I am confident that I have chosen the right place to build my research career at one of the world's top universities.

EMPLOYEE BENEFITS

The Australian National University provides a number of employee benefits for eligible employees.

Below is a brief summary of the benefits the ANU provides for eligible employees, which begin from the commencement of their appointment.

Family Friendly Workplace

- > Generous parental leave provisions – up to 26 weeks at full pay plus 6 weeks of career re-entry leave
- > On-campus childcare with the option to deduct payment from pre-tax salary
- > Flexible working arrangements
- > Breast feeding facilities
- > Dual career (spousal) hires

Career and Professional Development

- > In-house and external staff development opportunities, including individual coaching programme
- > Support for caring responsibility to attend conference/seminar
- > Outside Studies Program
- > Support for individual career planning/counselling services
- > Staff undergraduate and postgraduate scholarships
- > Career development leave program
- > Informal and formal mentoring

Salary Packaging

- > Novated (car) leases
- > Airline Membership – Qantas and Virgin Australia
- > Laptops, PDAs
- > Parking – Eligible staff are able to apply for permits for on-campus parking
- > Superannuation

Health and Wellbeing

- > On-campus staff counselling service
- > Independent and confidential Employee Assistance Program
- > On-campus fully credited primary health care facility – free flu vaccination
- > ANU Fitness Centre – gym and group fitness classes
- > Wellbeing programs for staff e.g. Women and Men's Health Checks
- > Dedicated Work Environment Group to support staff with Work, Health and Safety matters

Campus Life and Facilities

- > Cafes, banks, ATMs, chemist, newsagent, bookshop and a post office
- > ANU is a Smoke-Free Campus
- > Access to University Libraries – 5 in total
- > ANU GreenShare Car service
- > Campus Bicycle Fleet and a network of walking and bike paths around campus
- > ANU Green Unit to help reduce our carbon footprint
- > Corporate discount for rental cars
- > Vehicle Servicing and Maintenance with Autoco Belconnen –free pick up and drop off from the ANU
- > Well established and maintained precincts for acoustic and other events e.g. University House, Llewellyn Hall
- > Well maintained gardens and sporting/recreation facilities

Salary and Rewards

- > Contribution of up to 17% superannuation (in addition to base salary)
- > On-campus Unisuper consultant available for general advice on superannuation
- > ANU staff health insurance plan with HCF for Australian resident and non-resident staff
- > Recognition of Prior Service with another Australian university or Commonwealth authority

Learning communities

- > Student-led organisations inclusive and open to everyone. These communities encompasses areas such as:
 - Creative arts;
 - Cultures;
 - Global challenges
 - History; and
 - Sustainability

For additional information, please contact
The College of Engineering and Computer Science
Human Resources
E hr.cecs@anu.edu.au

A WORLD-LEADING UNIVERSITY

The Australian National University (ANU) is one of the world's foremost research universities.

Distinguished by its relentless pursuit of excellence, the University attracts leading academics and outstanding students from Australia and around the world.

Further information about ANU can be found at:
anu.edu.au/about

History

The University was established by the Commonwealth Parliament in 1946 specifically to lead the development of the intellectual capacity of the nation through research and research training in line with the best international standards. It is the only Australian university established by a Commonwealth Act of Parliament. In 1960, the University accepted responsibility for undergraduate education along with an expectation that the highest standards of education would be achieved.

Scale

The University has 4,300 staff, 10,286 undergraduates and 6,925 postgraduate students. Its annual revenue exceeds \$1.0 billion and consolidated assets are worth \$2.5 billion

Partnerships

The University has strong links with leading research institutions in Australia and overseas. It is a founding member of the International Alliance of Research Universities, a co-operative network of 10 eminent international research-intensive universities which includes:

- > University of Cambridge
- > University of Oxford
- > University of California, Berkeley
- > Yale University
- > Peking University
- > National University of Singapore
- > University of Tokyo
- > University of Copenhagen
- > ETH Zurich

Research-intensive education

As the specially-chartered national university, the University conducts research at the highest levels in all of its colleges, and offers a unique research-led education to undergraduate and postgraduate students as well as postdoctoral fellows.

The University advances the national intellectual and creative capacity in three key ways:

1. Through broad-based research and research-intensive education in the disciplines fundamental to all knowledge: the humanities, the sciences and the social sciences,
2. By supporting research and research-intensive education in a spectrum of professional disciplines, and
3. By studying Australia in its various contexts.

It is the aim of the University to achieve its objectives by creating an inspirational working environment for all its staff, students and visitors.

In each of its endeavours, the University strives to achieve at the levels of the world's great universities.

Location

The University campus has over 200 buildings and occupies 145 hectares adjacent to the city centre of Canberra. The University also has a number of smaller campuses:

- > Mount Stromlo Observatory (west of Canberra)
- > Siding Spring Observatory (near Coonabarabran, western New South Wales)
- > North Australia Research Unit (Darwin, Northern Territory)
- > Kioloa (coastal campus near Bawley Point, on the New South Wales South Coast)
- > ANU Medical School – The Canberra Hospital campus
- > ANU Medical School – Calvary Hospital
- > Health Facilities in South East New South Wales

The Australian National University,
Canberra ACT 2600 Australia

CRICOS Provider #00120C



Position Description

College / Division:	College of Engineering & Computer Science
Position Title:	Associate Professor/Professor
Classification:	Academic Level D/E
Responsible to:	Deputy Dean

PURPOSE STATEMENT:

The ANU College of Engineering and Computer Science is dedicated to contributing to The Australian National University's reputation for excellence in research and research-led education, bringing together expertise across a range of areas to reimagine the role of engineering and computing for future generations.

This position is to support the College Dean to shape an agenda to transform the way science and technology are integrated with communities and society in the 21st century. This includes reimagining the physical environment, research, teaching and collaborative spaces on campus, helping us to create an inviting and cohesive College precinct for our staff and students

KEY ACCOUNTABILITY AREAS:

About the Reimagine Project:

The Dean of the ANU College of Engineering and Computer Science is leading the Reimagine Project, a new type of engineering and computing, one that is custom built and fit for the middle of the 21st century. This is an interdisciplinary venture, with the aim to attract the very best and brightest from around the world to find and solve problems – not just engineers or computer scientists but the brightest minds both from industry and academia, with varied backgrounds and areas of expertise.

The purpose of this appointment is to:

- Support the establishment of an innovative, interdisciplinary, outwardly-focused research program;
- 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 modern, unique programs that are globally relevant to equip our students with diverse and multidisciplinary skills.

Position Dimension & Relationships:

The position will be accountable to the Deputy Dean, working in close collaboration with the College Dean, industry, government and other academic and professional staff across the University.

As a senior academic, the role involves the conduct of independent and/or team research activities at the highest international level in a highly diverse and collaborative environment; strong contributions to teaching and learning at both postgraduate and undergraduate levels; a commitment to the effective administration of the College; and a strong engagement in cross discipline studies within the College and the broader University environment, to integrate efforts and build critical mass in progressing the agenda of the Reimagine Project.

The staff member is expected to contribute cooperatively to the overall intellectual life of the College and University.

Role Statement:

Academic Level D

Specific duties required of a **Level D Academic** may include:

1. Undertake high impact independent research activities in the area of secure hardware and software systems or a related area in alignment to the strategies of the Reimagine Project.
2. Significant involvement in the sharing of this new body of knowledge through Technology and/or a combination of these research areas that are strategically complementary to the existing expertise of the College with a view to publishing original, innovative and multi-disciplinary results in international refereed

journals, present research at academic seminars and at a national and international conferences, and collaborate with other researchers at an international level.

3. In collaboration with senior academics, hold a key role in seeking and generating resources to support the development of deep and transformational disciplinary expertise to round out into core engineering and computing areas, through engagements with a range of funding bodies and also through the preparation of a combination of multi-party collaborative research proposals such as the Australian Research Council (ARC), industry funds and approved consultancy arrangements. Where appropriate, oversee the financial management of grants received for research projects.
4. Establish and maintain relationships with industry, government and the wider research community to enhance cross-disciplinary collaborations and support the translation of research outcomes into applications.
5. Make a strong contribution to the teaching activities of the College at the undergraduate and graduate levels. This includes, but is not limited to, course coordination including the development of and responsibility for curriculum/programs of study.
6. Supervise students working on individual or group projects at undergraduate, honours, graduate-coursework levels. Supervision of research students.
7. Manage and provide leadership through team development, mentoring and career development of less senior academic in alignment with the performance development process at the ANU.
8. Proactively contribute to all aspects of the operational of the College and University and assist in outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
9. Lead and initiate community outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
10. Maintain and actively promote high academic standards in all education, research and administration endeavours.
11. Take responsibility for their own workplace health and safety and not wilfully place at risk the health and safety of another person in the workplace.
- 12. Other duties as required consistent with the classification level of the position.**

Academic Level E

In their role as ANU academic level E the appointee will be expected to:

1. Undertake and foster high impact independent research in the area of secure hardware and software systems or a related area in alignment to the strategies of the Reimagine Project
2. High level involvement in the sharing of new body of knowledge through Technology and/or a combination of these research areas that are strategically complementary to the existing expertise of the College with a view to publishing original, innovative and multi-disciplinary results in international refereed journals, present research at academic seminars and at prestigious national and international conferences, and collaborate with other researchers at an international level.
3. Take a lead role in seeking and generating resources to support the building of the new applied science through engagements with a range of funding bodies through the preparation of a combination of multi-party collaborative research proposals such as the Australian Research Council (ARC), industry funds and approved consultancy arrangements.
4. Make a distinguished contribution to the teaching activities of the College at the undergraduate and graduate levels. This includes, but is not limited to, taking a leadership role in curriculum design and review, design and implementation of innovative pedagogy, and establishment of degree programs in collaboration with colleagues.
5. Supervise students working on individual or group projects at undergraduate, honours, graduate-coursework levels. Supervision of research students.
6. Lead, supervise and develop less senior academic and research support staff in the School. . Providing leadership, 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 College and University more broadly. This may include taking on leadership and broad supervisory roles.
8. Lead and initiate community outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
9. Maintain and actively promote high academic standards in all education, research and administration endeavours undertaken by the College and the University.
10. 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.

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

SELECTION CRITERIA:

Academic Level D:

1. A PhD or equivalent that is relevant to secure hardware and software systems or a related area, with a strong track record of independent research as evidenced by high impact research outputs in industry, government or academic environments.
2. Proven capacity to contribute to the strategic priorities and activities of the Reimagine project, including a commitment to enhancing diversity.
3. A strong orientation to collaborative research, team-based projects and interdisciplinary activities and interests.
4. A strong record of leading and winning bids for external funding (if relevant in your industry) to support individual and collaborative research activities, and the ability to identify similar opportunities for others to pursue and to provide mentoring in the process.
5. Outstanding communication skills with the ability to inspire a wide range of audiences, including in a cross-disciplinary areas and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
6. Evidence of effective teaching, training or mentoring (if relevant in your industry) and of the ability to contribute significantly to setting the education agenda of the College.
7. Capacity to foster graduate student education and inspire undergraduate students along with a commitment to outreach activities involving the general community, schools, public sector, industry and the wider research community.
8. Ability to provide leadership to early-career researchers 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
9. A demonstrated high-level understanding of diversity and inclusion principles and a commitment to the application of these policies in a University context.

*Consistent with their relative to opportunity to do so, A **Level D Academic** will normally have a relevant doctoral qualification or equivalent accreditation and standing together with subsequent research experience. This may not apply to candidates coming from different fields such as industry or government. Once in the role, there will be an expectation of academic excellence, making an outstanding contribution to research and, in this particular position, the ability to collaborate with internal and external stakeholders outside of your domain*

A position at this level will require a demonstrated strong record of research output in academia, industry or government in secure hardware and software systems.

Academic Level E:

1. A PhD or equivalent that is relevant to secure hardware and software systems, or a related area, with an outstanding track record of independent research as evidenced by high impact research outputs in industry, government or academic environments.
2. Proven capacity to contribute to the strategic priorities and activities of the Reimagine project, including a commitment to enhancing diversity.
3. Highly demonstrated orientation to collaborative research, team based projects and interdisciplinary activities and interests.
4. An extensive record of leading and winning bids for external funding (if relevant to your industry) to support individual and collaborative research activities, and the ability to identify similar opportunities for others to pursue and to provide mentoring in the process.
5. 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.
6. Excellent oral and written English language skills and a demonstrated ability to inspire a wide range of audiences, including in a cross-disciplinary areas and to foster respectful and productive working relationships with staff, students and colleagues at all levels.

7. The ability to make a strategic and significant contribution to the education agenda of the College and, where appropriate to your industry, evidence of outstanding teaching at all levels.
8. Highly demonstrated capacity to foster graduate student education and inspire undergraduate students along with a commitment to outreach activities involving the general community, schools, public sector, industry and the wider research community
9. Proven ability to provide leadership to early and mid-career researchers 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
10. A demonstrated high-level understanding of equal employment opportunities principles and a commitment to the application of these policies in a University context.

Consistent with their relative opportunity to do so, a **Professor** 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. Academic positions are expected to possess leadership skills in order to foster excellence in that field of research within the university, the discipline and/or the profession and within the scholarly and/or general community. Experience in directing significant research groups, either in academia, industry or government in secure hardware and software systems is also expected.

Supervisor Signature:		Date:	
Printed Name:		Uni ID:	

References:Academic Minimum Standards