Research Fellow, Software Engineering

DEAKIN UNIVERSITY

CONTACT

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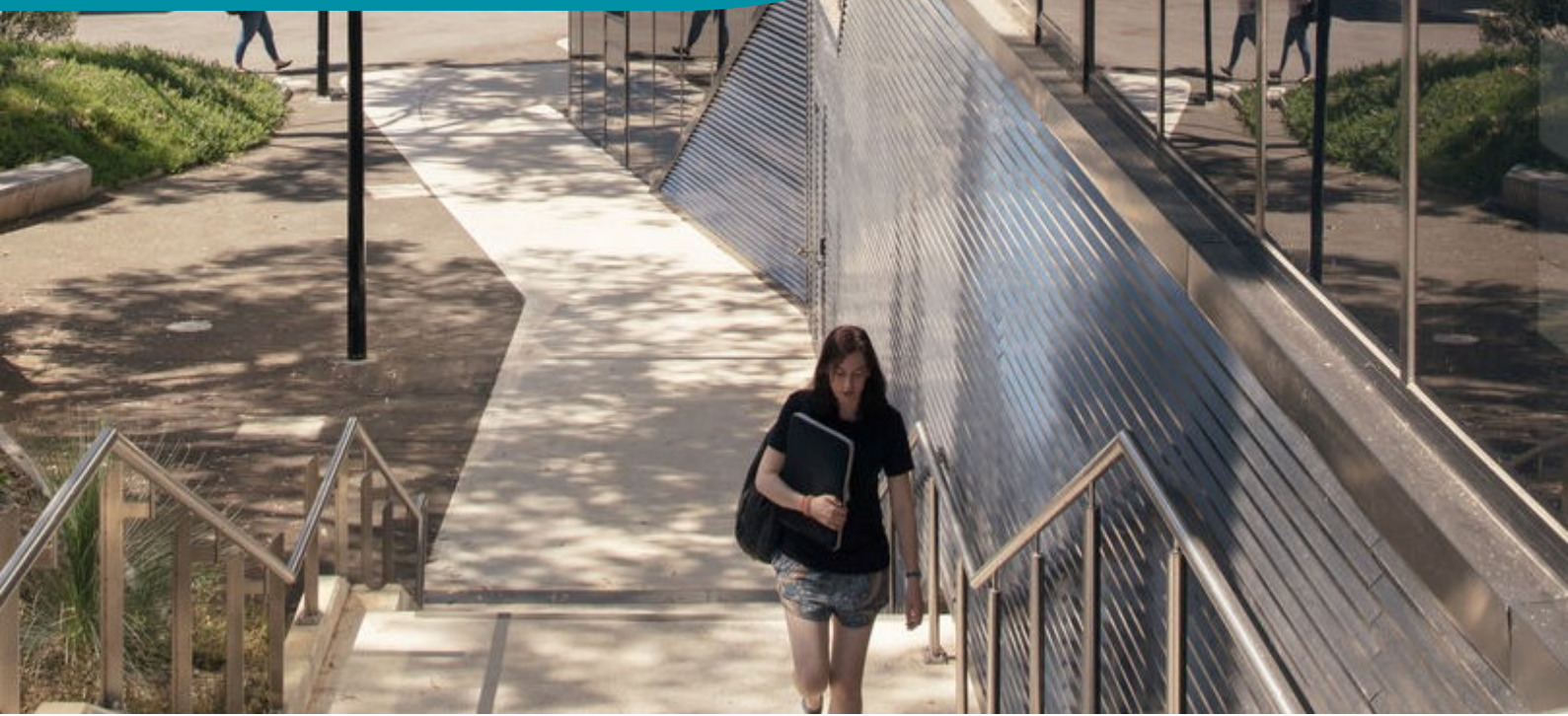
About Deakin

Deakin's growing reputation is reflected in its rapid rise in international rankings; Deakin entered the prestigious Academic Ranking of World Universities for the first time in 2014 and now ranks an estimated 261 (AWRU 2019). Deakin is ranked 29 in the QS ranking of the world's top universities under 50 years.

Established in 1974, Deakin University was named after the leader of the Australian Federation movement and the nation's second Prime Minister, Alfred Deakin.

Deakin University has five campuses, one in Melbourne's eastern suburbs, two in the port city of Geelong, one in Warrnambool on the south-west coast of Victoria, and more than 15,000 students study predominantly online as part of Deakin's Cloud Campus.

All students, regardless of their campus or mode of study, benefit from Deakin's award-winning digital environment.

Deakin is proud of its inclusive and student-focused culture and its reputation for using innovative digital solutions to provide an engaging and personalised learning experience. Deakin is committed to lifelong learning, providing students with choices about how, when and where learning occurs.

Deakin prides itself on developing career-ready graduates who are innovative, resilient, and well prepared for rapidly changing workforce needs. Deakin has a strong focus on teaching, with student satisfaction and the employability of its students being key indicators of success. Deakin ranks first in Victoria for student satisfaction (SES) and graduate employability (GOS).

Deakin's four faculties offer courses across the arts, design, science, sport, nutrition, architecture, business, law, medicine, optometry, engineering, nursing, allied health, psychology and teaching.

With over 60 000 students Deakin is one of Australia's largest universities and is consistently ranked in the top 1% of the world's universities.

As an Australian university with global impact, Deakin is translating its research into the commercial outcomes that will drive the innovation Australia's economy needs now and into the future. Research at Deakin focusses on innovation and robust partnerships with industry and business, and it is building a formidable international reputation in areas of emerging national social, economic and political priority in its core areas of health, sport, carbon fibre, energy and cyber security. Deakin's manufacturing innovation precinct provides an important link between technological innovation and successful industry outcomes, strengthening and streamlining pathways for commercial research.

Our strategy

Deakin's vision and mission is articulated in its strategic plan *LIVE the future: Agenda 2020.* Through *LIVE the future*, Deakin aspires to be Australia's premier university in driving the digital frontier, enabling globally connected education for the jobs of the future, and research that makes a difference to the communities Deakin serves.

Informed by its Australian and Victorian context and engaged locally in the communities it serves, Deakin advances:

- Learning – offering students a brilliant education where they are and where they want to go
- Ideas – making a difference through world-class innovation and research
- Value – strengthening our communities, enabling our partners and enhancing our enterprise
- Experience – delighting our students, our alumni, our staff and our friends.

These four interconnecting elements form the acronym *LIVE*, and together they articulate the Deakin promise to its students, staff, alumni, partners and friends.

Faculty of Science, Engineering and Built Environment

The Faculty of Science, Engineering and Built Environment at Deakin University places great emphasis on excellence in its teaching and learning, research and research training, community engagement, and staff empowerment. We pride ourselves on our national and international activities and the partnerships we have formed with industry, community, government, and the professions.

The Faculty of Science, Engineering and Built Environment consists of four schools, each with a multi-discipline mix of teaching and research offerings and a strong emphasis on research excellence that informs our teaching programs.

School of Architecture and Built Environment
- Architecture
- Construction management
- Landscape architecture

School of Engineering
- Civil
- Electrical and electronics
- Electrical and renewable energy
- Engineering Management
- Environmental Engineering
- Mechanical
- Mechatronics
- Mechanical Design

School of Information Technology
- Artificial intelligence
- Computer science
- Creative technologies
- Cyber security
- Data science
- Information technology
- Internet of things
- Mathematics
- Software engineering
- Virtual and augmented reality

School of Life and Environmental Sciences
- Biological science
- Biomedical science
- Biotechnology
- Fisheries and aquaculture
- Forensic science
- Environmental management and sustainability
- Marine biology
- Science
- Sustainable regional development
- Wildlife and conservation biology
- Zoology and animal science.

The Faculty Executive includes the Executive Dean, the four Heads of School, the four Associate Deans (Teaching and Learning; International and Partnerships; Research; International Research Engagement), the Director of Research Partnerships, and the Faculty General Manager. Collectively, this leadership team establishes and delivers on the Faculty's strategic activities.

Deakin's Promise to Equity, Diversity and Inclusion

At Deakin we value diversity, embrace difference and nurture a connected, safe and respectful community. We recognise that our academic workforce is increasingly diverse with a variety of backgrounds, experiences and responsibilities. In many cases, academic careers can be put on hold through career breaks or part-time work arrangements to take on caring duties, gain experience in other industries, for medical reasons or other personal circumstances.

Achievement relative to opportunity places more emphasis on the quality as opposed to the quantity of research outputs. In your application, we encourage you to comment on your achievements relative to opportunity.

School of Information Technology

The School of Information Technology delivers courses in information technology, computer science, data analytics, cyber security and software engineering to provide our graduates with a sound platform for the diverse employment opportunities that will exist in the future. The recent Academic Ranking of World Universities placed Deakin in the top 1 percent worldwide for Computer Science.

Learning within the School of Information Technology encompasses a fundamental understanding of computer science that is coupled with extensive experiential development of requisite technical skills in the engineering and administration of complex networks.

We equip our graduates with the skills to confidently develop next generation IT systems, including cyber-physical and cognitive systems. We offer undergraduate and postgraduate courses in areas including computer science, data science, cyber security, software engineering, virtual and augmented reality, games development, creative technologies, cloud computing, application development, IT services and networking. Our courses are informed through active and ongoing industry connections and provide work integrated, and industry based learning experiences that enable graduates to be work ready and globally capable. Our students have the opportunity to gain experience through involvement with the Applied Artificial Intelligence Institute (A^{2}I^2) and practical internships in a range of companies, and industry capstone projects.

We recognise the importance of being closely aligned with industry and maintain strong links with leading organisations and government agencies. Industry representation is a key component of our course advisory boards and helps to ensure our curriculum is current and relevant to industry needs, which is integral in a fast-changing sector. Our IT degrees are accredited by the Australian Computer Society (ACS).

Deakin University is home to three of the country's leading IT strategic research centres, the Applied Artificial Intelligence Institute (A^{2}I^2), Centre for Cyber Security Research and Innovation (CSRI) and the Institute for Intelligent Systems Research and Innovation (IISRI). The School provides world-class research opportunities through its key research groups in Artificial Intelligence and Data Analytics (AIDA) and Distributed Systems and Internet of Things (DIoT), Software Engineering and Innovation Research Centre (SEIC), Human-computer Interaction for Virtual Experiences (HIVE), Information Technology for Future Education (ITFE), as well as industry focused R&D through the Applied Artificial Intelligence Institute (A^{2}I^2).

The School of Information Technology is committed to the generation of fundamental knowledge and high-quality research training for our students. We are passionate about training tomorrow's technology leaders and helping industry advance and maintain their competitive edge benefitting the world we live in.

Our mission is to carry out world-class research that makes a difference to the communities we serve and to equip tomorrow's information technology graduates with the knowledge, skills and practical experience required for successful careers in this rapidly changing field.
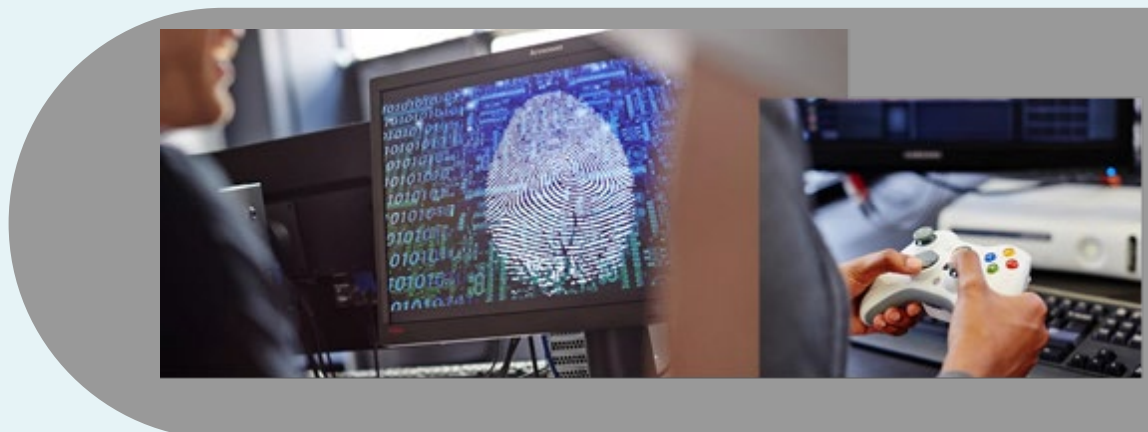
Research Fellow, Software Engineering

The Research Fellow, Software Engineering will be responsible for researching and publishing in Software Engineering. The position supports the School's Software Engineering Innovation Lab (SEIL) to publish and develop high quality research grant applications, especially in collaboration with industry (as for example, ARC Linkage applications).

RESEARCH ONLY LEVEL B

Level B members of staff typically perform these duties at the following levels:

Research and Scholarship

- An emerging reputation in research and scholarship, relative to opportunity, through publication or exhibition in quality outlets
- Contributing to their specific areas of research, scholarship or creative activity

- Contributing to research projects and collaborations to create new insights and opportunities
- Contributing to research collaborations and industry partnerships which have demonstrable outcomes
- Contributing to successful development of research programs or partnerships
- Supervising or examining Honours students, or making a contribution to the supervision, management and timely completion of HDR students
- Contributing to a culture of research excellence in the University
- Contributing to the successful application of scholarly and research expertise to innovation and invention, with appropriate involvement in the commercialisation of outcomes

Performance expectations

Annual performance objectives and expected outcomes will be defined for this role in accordance with the Minimum Standards and Typical Duties for Academic Levels (MSTDALs) and Faculty Research Expectation Models (FREMs). Specific duties will be allocated with reference to the applicable Workload Allocation Model (WAM). These documents are updated from time to time and are available on request.

Research Fellow, Software Engineering

ORGANISATIONAL RELATIONSHIPS

The appointee will be actively involved in research related activities. The appointee will contribute to consulting, industry partnerships and professional activities. The appointee will support the School's Software Engineering Innovation Lab (SEIL) to develop high quality research grant applications, especially ARC Linkage applications and/or in other industry-focused research grant schemes.

ORGANISATIONAL CONTEXT

The Research Fellow, Software Engineering will report to the Associate Head of School (Research).

They may also take direction from the Head of School and the Associate Head of School (Industry Research).

POSITION LOCATION

This position is located at Melbourne Burwood Campus.

SELECTION CRITERIA - ESSENTIAL

QUALIFICATIONS

- PhD in Software Engineering, Computer Science, Electrical and Electronic Engineering or a relevant field.

RESEARCH

- Sound knowledge of Software Engineering principles and practices in general and in-depth expertise in at least one of its sub-disciplines (for example, Requirements Engineering, Software Maintenance and Evolution, Software Construction or Software Quality).
- A strong record of high quality peer reviewed publications in highly ranked international journals (e.g. Scimago Q1 ranked journals) and/or conferences (e.g. CORE A*/A conferences) relative to opportunity
- Demonstrated ability to conduct research in competitive and/or industry projects
- Demonstrated ability to support the development of research grant applications, especially ARC Linkage applications and/or other industry-focused grant schemes
- Ability to conduct high-quality research individually and collaboratively as a member of a research team
- Capacity to undertake and contribute to industry focused research

OTHER

- Experience in contributing to the supervision of undergraduate honours and / or research higher degree students
- Demonstrated excellent oral, written communication and presentation skills
- Demonstrated organisational skills including the ability to demonstrate scientific rigour and maintain a high stand of laboratory and data record keeping

PERSONAL QUALITIES

- Interpersonal skills that support the ability to establish and maintain highly effective working relationships with a diverse range of people including students, the staff of the Faculty and School and with other members of the University
- Ability to adapt to changes in the environment and effectively meet new challenges
- Commitment to the University's Mission, Core Commitments and Values which include - excellence, academic freedom, collegiality, continuous improvement, ethical behaviour, accountability and environmental responsibility

Appointment process and how to apply

Application

Thank you for your interest in the position of Research Fellow, Software Engineering

Please direct all correspondence and enquiries to:

Professor Jean-Guy Schneider
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jeanguy.schneider@deakin.edu.au

How to apply

Please apply online via:

deakin.edu.au/about-deakin/work-at-deakin

Include cover letter, curriculum vitae and a response to the Selection Criteria.

Interview process

An initial screening of prospective candidates will take place.

Short-listed candidates will be interviewed by a panel of esteemed colleagues.

Details of professional referees will be required prior to interview.

Remuneration and benefits

An attractive remuneration package is offered. Salary will be commensurate with qualifications, experience and research record.

Term of appointment

Appointment is for a fixed term position for three years which is subject to an initial 24 month probationary period

Special Requirement/s

This role has been identified as having contact with children and requires the incumbent to apply for and maintain a Working With Children Check (refer to Deakin's Recruitment Procedure for further details).

Our locations

Deakin has five campuses, one in **Burwood**, two in Geelong (**Waterfront** and **Waurn Ponds**), one in **Warrnambool** and the vibrant Cloud Campus where over 25% of our students study. All students, regardless of their campus or mode of study, benefit from Deakin's award-winning digital environment.

Melbourne has been named the worlds' most liveable city for more than 5 years running*.

Further information regarding our locations and relocating to Victoria can be found here:

Our locations

Considering Relocation

Melbourne timelapse

*The Economist's annual study

BURWOOD CAMPUS

Melbourne Burwood Campus is Deakin's thriving metropolitan campus, attracting over 32,000 undergraduate and postgraduate on-campus students. It boasts open and inviting spaces for socialising and studying, innovative architecture, spacious new buildings and wireless hotspots.