



Position Description – Research Fellow (Postdoctoral) - Bushfire Evacuation

Position Details

Position Title:	Research Fellow (Postdoctoral) - Bushfire Evacuation
College/Portfolio:	STEM College
School/Group:	School of Engineering
Campus Location:	Based at the Melbourne CBD campus, however may be required to work and/or be based at other campuses of the University.
Classification:	Academic Level B
Employment Type:	Fixed Term (Replacement Employee)
Time Fraction:	1.0 FTE

RMIT University

RMIT is a multi-sector university of technology, design and enterprise. The University's mission is to help shape the world through research, innovation and engagement, and to create transformative experiences for students to prepare them for life and work. For more information on RMIT University follow the links below.

<https://www.rmit.edu.au/about>

<https://www.universitiesaustralia.edu.au/university/rmit-university/>

<https://www.rmit.edu.au/about/facts-figures>

Our three main campuses in Melbourne are located in the heart of the City, Brunswick, Bundoora and Point Cook, along with other Victorian locations. There are also two campuses in Vietnam (Hanoi and Ho Chi Minh City) and a centre in Barcelona, Spain. RMIT is a truly global university.

<https://www.rmit.edu.au/about/our-locations-and-facilities>

We are also committed to redefining our relationship in working with, and supporting, Indigenous self-determination. Our goal is to achieve lasting transformation by maturing our values, culture, policy and structures in a way that embeds reconciliation in everything we do. We are changing our ways of knowing, working and being to support sustainable reconciliation and activate a relationship between Indigenous and non-Indigenous staff, students and community. Our three campuses in Melbourne (City, Brunswick and Bundoora campuses) are located on the unceded lands of the people of the Woi Wurrung and Boon Wurrung language groups of the eastern Kulin Nation.

Why work at RMIT University

Our people make everything at the University possible. We encourage new approaches to work and learning, stimulating change to drive positive impact. Find out more about working at RMIT University, what we stand for and why we are an Employer of Choice.

<https://www.rmit.edu.au/careers>

We want to attract those who will make a difference. View RMIT's impressive standings in university rankings.

<https://www.rmit.edu.au/about/facts-figures/reputation-and-rankings>

STEM College

The STEM College holds a leading position and expertise in the science, technology, engineering, mathematics and health (STEM) fields. We are uniquely positioned to influence and partner with industry, as never before.

STEM College is a community of exceptional STEM researchers, teachers, inventors, designers and game-changers, supported by talented professional staff. We offer higher education programs across all STEM disciplines at the Bachelor, Master and PhD levels, and ensure our students experience an education that is work-aligned and life-changing.

The College is renowned for its exemplary research in many STEM areas including advanced manufacturing and design; computing technologies; health innovation and translational medicine; nano materials and devices; and sustainable systems. Our brilliant researchers attract funding from government and industry sources.

Industry is at the heart of what we do. It ensures our research has real world impact, and our students are truly work-ready. Under the leadership of DVC STEM College & Vice President, Digital Innovation, we have established new hubs of industry-connected digital innovation and endeavour and are engaging with global STEM organisations at scale.

Our diversity and shared values empower our work, and we are proud of the College's inclusive, caring culture. We offer a safe, dynamic work environment, and support every member of our community to achieve their potential. The College appointed Victoria's first ever Dean of STEM, Diversity & Inclusion in 2020, and this role drives gender equity, diversity and inclusion strategies across the College.

STEM College employs 1,000 staff who deliver onshore and offshore programs to approximately 20,000 students.

We are here to positively impact the world and create the next generation of STEM leaders.

www.rmit.edu.au/seh

School of Engineering

The School of Engineering is one of the largest Engineering Schools in Australia. It has over 350 staff and 7000 students, including 750 HDR students. The School is committed to driving innovation and collaboration through our industry partnerships. Our industry partners range from small companies to multinational organisations and we work together on translating our research into impact for our partners and the wider community.

The School has six Departments:

- Aerospace Engineering
- Biomedical Engineering
- Chemical and Environmental Engineering
- Civil and Infrastructure Engineering
- Electrical and Electronic Engineering
- Mechanical, Manufacturing and Mechatronics Engineering

In 2023 the School developed a new strategic plan, which will see an increasing emphasis on engagement with industry and other external partners. The School is developing new industry led degrees, where our students learn whilst working for companies, as well as innovation hubs where we will co-locate industry partners, our research teams and our undergraduate students.

Over the next three to five years the School of Engineering will support these new strategic plans through investments in new facilities. This will include reimagining our teaching laboratories, where we will use new digital technologies to enhance the student experience, as well as research labs where partnerships with industry will enable us to maintain leading research facilities. The STEM College is also developing plans for a large new building in the Melbourne City Campus, and the School of Engineering is expected to hold significant space in this new building.

RMIT is a global university, and the School of Engineering has students and research partners across South East Asia and Europe. This includes two campuses in Vietnam, as well as partnerships in Hong Kong, Singapore and we recently entered into a partnership with the Birla Institute of Technology and Science in India. The School also has a research centre in Barcelona, which provides access to European funding and industry partners. The School will continue to grow our international activities with the aim of becoming a globally connected School that translates technologies and training across continents.

Position Summary

We are seeking a Postdoctoral Research Fellow to join RMIT University. The role will be primarily based within the School of Engineering but work closely with interdisciplinary teams across the university including the School of Global, Urban and Social Studies and the School of Computing Technologies to advance research on bushfire evacuation and emergency planning and preparedness in hazard events. This project represents one of many within the STEM College that fosters interdisciplinary collaboration both within the university and among our external collaborators and stakeholders to increase the resilience of bushfire-prone communities in Australia and around the world.

The Postdoctoral Research Fellow, for 0.5 FTE of their time, will support the research aim and objectives of the ARC Future Fellowship project “Investigating Bushfire Evacuation Travel Behaviour in High-risk Communities”. Specifically, the research aims to investigate individual-level travel behaviour of resident and tourist evacuees in bushfires occurring in high-risk areas in Australia, Canada and the United States in order to develop critically needed conceptual and empirical models and inform the creation of predictive simulation tools. In this work, a Postdoctoral Research Fellow will engage in critical behavioural research to better understand resident and tourist evacuation behaviour during bushfires, including the conduct of online surveys with bushfire survivors to study evacuee transport behaviour. The Postdoctoral Research Fellow will be a key team member in the collection and analysis of quantitative data, involving the development of statistical models.

In addition, the Postdoctoral Research Fellow will also engage in other research projects that focus on evacuation and emergency communications during bushfires and other hazards, including tsunami and flooding events. These projects involve understanding how the public comprehends and responds to hazard predictions and uncertainty and further development of evacuation-based empirical models and theories to expand evacuation simulation capabilities.

The Postdoctoral Research Fellow will be expected to plan, develop and engage in high quality research projects that are aligned with the University’s research focus areas. They will embed their research expertise into the life of the School through the development of high-quality, productivity-driven research networks across RMIT and with local and national, internal and external partners. The Fellow will be expected to engage in high quality research projects, to achieve success in attracting research funding and to produce high quality outputs.

Both domestic and international travel may be required as part of this role for data collection and participation in workshops, conferences and symposia to communicate research findings.

Reporting Line

Reports to: Dr. Erica Kuligowski, ARC Future Fellow

Direct reports: N/A

Organisational Accountabilities

RMIT University is committed to the health, safety and wellbeing of its staff. RMIT and its staff must comply with a range of statutory requirements, including equal opportunity, occupational health and safety, privacy and trade practice. RMIT also expects staff to comply with its policy and procedures, which relate to statutory requirements and our ways of working.

RMIT is committed to providing a safe environment for children and young people in our community. Read about our commitment and child safe practices. <https://www.rmit.edu.au/about/our-locations-and-facilities/facilities/safety-security/child-safety>.

Appointees are accountable for completing training on these matters and ensuring their knowledge and the knowledge of their staff is up to date.

Key Accountabilities

- Conduct high quality research individually or as part of a team including: managing research projects within timelines and budget and ensuring compliance with quality and reporting requirements; publishing research results in high quality outlets as lead or co-author; preparing and submitting external research funding applications; and supervising higher degree by research candidates.
- Work closely with interdisciplinary team members – including domestic and international scholars and industry partners.
- Actively contribute to the development of research strategy within the research team, ensuring it aligns to University strategy.
- Develop and communicate research outputs and outcomes in research and practice-based workshops, seminars, conferences, and symposia.

Key Selection Criteria

1. Evidence of experience in social science research methods, especially quantitative research methods, and in particular, statistical modelling of survey and/or experimental data (e.g., structural equation modelling, discrete choice modelling, hybrid choice modelling).
2. Emerging track record and recognition for quality research outputs which will contribute to existing Department and School research areas evidenced by publications, development of new research initiatives, competitive research funding, and industry links.
3. Demonstrated ability to supervise higher degree by research candidates.
4. Ability to build effective networks with colleagues and generate alternative funding projects through effective liaison with industry and government.
5. Excellent interpersonal and communications skills appropriate for interacting with higher degree by research candidates, staff and industry, together with a strong commitment to teamwork and multidisciplinary collaboration.
6. Ability to coordinate teams and conduct timely management of research projects.

Qualifications

Mandatory: PhD in relevant field such as (but not limited to) the social sciences (e.g., psychology or sociology); urban studies; organisational studies; computational social science; or fire, civil or humanitarian engineering; or equivalent in relevant field.

Preferred: Strong track record in research on disaster preparedness, response and/or recovery (including a body of work published in their disciplinary background peer reviewed journals and presentations at relevant conferences/symposia)

Eligibility: Only applications that meet mandatory qualification requirements and clearly respond to each Key Selection Criteria will be considered.

Note: Appointment to this position is subject to passing a Working with Children Check and other checks as required by the specific role. Maintaining a valid Working With Children Check is a condition of employment at RMIT.