RMIT UNIVERSITY

Position Description – Research Fellow

Position Details

Position Title: Research Fellow

College/Portfolio:
STEM

School/Group:
Computer Science and Information Technology

Campus Location: Based at the City campus, but may be required to work and/or be based at other campuses of the University.

Classification: Academic Level B

Employment Type: Fixed Term

Time Fraction: 1.0

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.

School of Computing Technologies

There are three discipline clusters in the Computing Technologies School –

• Artificial Intelligence

• Cloud, Systems & Security

• Data Science

The School's PhD students and faculty conduct world class research in Artificial Intelligence (AI), Search and Recommendation, Machine Learning, Data Analytics, Distributed Computing and Cybersecurity. Our goal is consolidating our digital innovation capabilities and expertise into one School positions us to respond to strategic industry and economic opportunities aligned to digital technology and transformations. The School will fast-track digital innovation across all College programs and elevate our external position as a leader in technology and digital innovation. The School's leadership is tasked with the significant responsibility of building the architecture and capability to position RMIT with a supercomputer capacity and a world class digital leading lab which

will support interdisciplinary activities as they transition into augmented reality.

Details relating to the [School of Computing Technologies](#) in this link.

ARC Centre of Excellence for Automated Decision-Making and Society

About the Centre

The rapid expansion of automated decision-making enabled by technologies from machine learning to the blockchain has great potential benefits, while it also creates serious new risks to human rights and welfare. Potential harms range from data discrimination against disadvantaged communities to the spread of disinformation for political and commercial ends. Increasing inequality, lower productivity and diminished economic security have been highlighted as risks in the coming decade.

The [ARC Centre of Excellence for Automated Decision-Making and Society (ADM+S)](#) is a new, cross-disciplinary, national research centre, which aims to aims to create the knowledge and strategies necessary for responsible, ethical, and inclusive automated decision-making. Funded by the Australian Research Council from 2020 to 2026, ADM+S is hosted at RMIT in Melbourne, Australia,

with nodes in seven other Australian universities. The Centre brings together leading researchers in the humanities, social and technological sciences in an international industry, research and civil society network. Its priority domains for public engagement are news and media, transport, social services and health.

Position Summary

The Postdoctoral Research Fellow will contribute to a number of projects within the ARC Centre of Excellence, with a particular focus on measuring, modelling, and evaluating the fairness, bias, search algorithms and the information retrieved and generated by them. The breadth of possible project topics is extensive, and the following is a non-exhaustive list that a successful applicant could be involved in:

- Interactive information access and retrieval
- Explainable AI
- Responsible automated decision-making systems and evaluation
- Generative AI and Large Language Models

The fellow will be based in the School of Computing Technologies at RMIT University and will collaborate actively with the Centre of Excellence's national and international network of participants. All Centre postdoctoral research fellows will also have access to the Centre of Excellence's research training and professional development opportunities, international visiting fellowships and exchanges (travel arrangements permitting), and the Centre's network of industry partners.

Reporting Line

Reports to: Dean, School of Computing Technologies, Professor Mark Sanderson

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

1. Conducting high-quality research relevant to the centre, both independently and as part of project teams
2. Preparing and publishing research outcomes in relevant high-quality refereed journals, reports and/or books
3. Presenting research outcomes at seminars, conferences and industry meetings, and engaging with external stakeholders
4. Contributing to public understanding and debate through media, industry and/or policy engagement
5. Contributing actively to the ARC Centre's research culture, including participation in research collaboration and community-building within the Centre's research programmes and focus areas
6. Conforming to University and ARC Centre requirements with respect to research ethics and integrity and data management
7. Compliance with health and safety policies, procedures, hazard reporting and safe work practices

Key Selection Criteria

1. Completion of a PhD in Computer Science or a relevant discipline area within the past 5 years at the time of appointment, not including periods of career interruption due to carer's responsibilities, parental leave, illness, or disability.
2. Strong experience in at least one of the following areas: interactive systems, machine learning, deep learning, or data mining.
3. Demonstrated experience in developing and/or using state-of-the-art methods, software and tools in a relevant research context.
4. Solid experience in conducting experiments as required in the relevant expertise and subfield, for example:
   a. Solid experience in the design and conduct of user studies for evaluation of information access systems
   b. Solid experience in maintaining and contributing to public codebase or repository.
   c. Solid experience in performing machine learning experiments using multiple large-scale datasets and public benchmarks.
   d. Solid experience in establishing machine learning and/or deep learning pipeline.
5. Scholarly writing skills and experience in preparing publications for a variety of audiences, including *relevant publications in high quality Q1 peer reviewed journals and track records in A* conferences as ranked by CORE in AI, machine learning, and data mining, such as ICML, NeurIPS, ICLR, AAAI, KDD, WWW, WSDM, SIGIR, and other relevant A* conferences.*
6. Strong interest in the technical and societal problems related to the Fairness, Accountability, Transparency and Ethics (FATE) in AI, particularly in problems related to explainability and fairness. An evidence of publication on FATE-related topic is preferable, but not required.
7. Ability to work independently to generate distinctive contributions to scholarly knowledge and/or create real world outcomes.
8. Demonstrated ability to work effectively and collaboratively as part of a high-achieving and collegial research culture.
9. Well-developed oral and interpersonal skills with demonstrated ability to communicate effectively with a wide range of stakeholders and research collaborators, including presentations at seminars, conferences and industry events.
10. Optional/preferable: Emerging track record and recognition for high quality research engagement, including development of new research initiatives, competitive research funding, and industry links.

Qualifications

Mandatory: PhD or equivalent in relevant field

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.

Endorsed:	Signature:	**Approved:**	Signature:
	Name:		Name:
	Title:		Title:
	Date:		Date: