Position Description –Research Fellow

Position Details

Position Title:	Research Fellow – Spatial Research Manager
Position Number:	50065649
College/Portfolio:	College of Design and Social Context
School/Group:	School of Global, Urban and Social Studies Healthy Liveable Cities Research Group
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 *Salary Schedule:* http://www.rmit.edu.au/browse;ID=ewhtlt73t01
Employment Type:	Fixed term – Research
Time Fraction:	1.0

RMIT University

RMIT is a global university of technology, design and enterprise in which teaching, research and engagement are central to achieving positive impact and creating life-changing experiences for our students.

Founded in 1887, RMIT is a multi-sector university with more than 87,000 students including 15,000 at postgraduate level and 11,000 staff globally. The University offers Postgraduate, Undergraduate, Vocational Education and Online programs to provide students with a variety of work-relevant pathways.

With three campuses and two sites in Australia, two campuses in Vietnam and a research and industry collaboration centre in Barcelona, Spain, RMIT is a truly global university. RMIT also offers programs through partners in Singapore, Hong Kong, mainland China and Indonesia, and has research and industry partnerships on every continent.

RMIT enjoys an international reputation for excellence in education and applied and innovative research, as well as industry and community engagement.

RMIT prides itself on the strong industry links it has forged over its 130-year history. Collaboration with industry is integral to the University's leadership in education and research, and to the development of highly skilled, globally-focused graduates.

RMIT was ranked 250th in 2019 QS World University Rankings. The University is also ranked eighth in Australia and 30th in East Asia and the Pacific for employer reputation and 21st in the Top 50 Universities Under 50 Years Old.

In the 2018 QS Rankings by Subject, RMIT was ranked 11th in the world and number one in the Asia Pacific for Art and Design, and 26th in Architecture and the Built Environment. RMIT is also among the world's top 100 universities in Engineering (Civil and Structural; Electrical and Electronic; and Computer Science and Information Systems); Accounting and Finance; Business and Management Studies; and Communication and Media Studies. The 2018 Shanghai Ranking's Global Ranking of Academic Subjects highlighted RMIT's strength in Engineering and Technology in particular.

RMIT also ranks in the world's top 400 in the 2018 Academic Ranking of World Universities and in the world's top 500 in 2018 Times Higher Education World University Rankings.

For more information, visit rmit.edu.au/about.

The College of Design and Social Context (DSC)

The College of Design and Social Context encompasses RMIT University's renowned art, architecture, design, built environment, communication, and social science disciplines. The college has 24,500 students and over 1,000 staff located in 8 schools.

The College's academic programs are generally market leaders and in high demand. Based on a strong foundation of practise led, industry partnered teaching and research, we aim to deliver skilled graduates with a deep sense of purpose, and high impact research and innovation.

For more information see www.rmit.edu.au/dsc

School of Global, Urban and Social Studies (GUSS)

Located in the heart of Melbourne on RMIT's City Campus, the School of Global, Urban and Social Studies is one of RMIT's largest schools. The School's vision is to contribute to a just and sustainable world, and to deliver education, training and research in four areas of focus:
- Criminology, legal and justice studies
- Global studies, languages, translating and interpreting
- Social work, youth work and social policy
- Sustainability and urban planning

We provide academic programs in Higher Education in these four main areas. We are a strongly research active school with research centres of national and international reputation - the Centre for Urban Research and the Social and Global Studies Centre.

With outstanding industry links, strong pathways and excellent research records, most of the School's academic programs are leaders in the market and in high demand. We aim to ensure every student has a transformative experience to prepare them for life and work in the growing professional areas of the future.

For more information, see http://www.rmit.edu.au/socialhumanities

Position Summary

An exciting opportunity to join the dynamic, interdisciplinary Healthy Liveable Cities Research Group located within RMIT's Centre for Urban Research. The role involves leading and managing a small team to undertake research projects involving spatial analysis of the built environment using a range of methods, tools and data. The role will involve three major areas of focus; (i) the construction of spatial indicators using GIS and spatial databases, (ii) the development and use of agent-based models (ABM), and (iii) the dissemination of research findings through an online interactive mapping platform; the Urban Observatory.

The role is within a multidisciplinary team and there is the expectation the successful applicant will develop strong collaborative relationships within and beyond the research group, as well as being responsive to key academic and government stakeholder requirements and the funding environment.

Across the three focus areas, the successful applicant will be responsible for the scoping, planning, budgeting and managing the team's program-of-work. The role will also involve the day-to-day management of the team's activities under various grants and consultancies led by others in the Healthy Liveable Cities group team (and on occasion, for other academic colleagues). With thought leadership and effective use of resources and collaborations, the successful applicant will advance the state-of-the-art in the use of spatial information to design healthier, liveable cities.

Reporting Line

Reports to: Director, Enabling Capability Platform – Urban Futures
Direct reports: Up to 4 staff

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. 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

- Manage the Healthy Liveable Cities Research Group's spatial research program including:
    o Scoping, planning and budgeting of spatial analysis activities
    o Day-to-day team management in a matrix management environment
    o Management of and reporting on the program of work and grant/consultancy deliverables
- Oversee the construction of spatial indicators using GIS and spatial databases, including:
    o Apply a continuous improvement approach to the construction of spatial indicators including domain scope, geographic coverage, accuracy, automation, and documentation
    o Develop and maintain relationships with data providers, custodians, and collaborators
    o Manage data and software procurement and licensing
    o Provide technical support and leadership to spatial analysts within the team
    o Publish on spatial analysis methods, and contribute to publications resulting from the work of the team
- Apply agent-based models (ABM) in urban contexts to assist in the design of interventions that will improve the health and wellbeing of city residents:
    o Review, comprehend, modify and utilise ABMs developed within and external to the group to test priority interventions
    o Manage licensing and infrastructure procurement
    o Provide technical support and leadership to modellers within the team
    o Publish on simulation methods, and contribute to publications resulting from the work of the team
- Provide technical leadership on the further development of the group's online interactive mapping platform; the Urban Observatory:
    o Scope and manage implementation of functionality enhancements to the Urban Observatory
    o Ensure spatial research outputs are made available for dissemination through the Urban Observatory
    o Action and/or co-ordinate escalated support requests for the Urban Observatory
- Present at seminars/conferences/guest lectures
- Supervise and support postgraduate research students
- Contribute to the overall development of the Healthy Liveable Cities Research Group's research program, including:
    o Build and maintain relationships with other members of the Healthy Liveable Cities Research Group
    o Provide advice on the application of spatial methods
    o Participate in writing grant and other funding applications

Key Selection Criteria

1. Excellent interpersonal and communication skills appropriate for interacting with higher degree by research candidates, staff and industry, together with a strong commitment to teamwork and interdisciplinary collaboration.
2. Demonstrated experience in project management, including managing funded research projects including complex budgets, and reporting and timeline requirements.
3. Emerging nationally recognised research track record including record of high quality research outputs.
4. Ability to manage staff and willingness to supervise higher degree by research candidates to maximise research performance.
5. Demonstrated experience in the use of spatial analysis in an applied field.
6. Demonstrated experience in using GIS software and spatial databases, or a willingness to learn these technologies.
7. Demonstrated experience in the development and use of agent-based models.

8. Ability to program/script in Java, Python and SQL, or a willingness to learn these languages.
9. Strong presentation skills, including the ability to present technical content to non-technical audiences.

Qualifications

Mandatory: PhD or equivalent in computer science, engineering or relevant field

Desirable (one or more would be advantageous):
- Experience in supervising students
- Experience in grant writing
- Web mapping and/or web development
- Visualisation and cartography
- Remote sensing
- Machine and deep learning

Note: Appointment to this position is subject to passing a Working with Children check.

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