



RESEARCH ASSISTANT - (COMPUTATIONAL DESIGN)

DEPARTMENT/UNIT Department of Human Centred Computing

FACULTY/DIVISION Faculty of Information Technology

CLASSIFICATION Level A

DESIGNATED CAMPUS OR LOCATION Caulfield campus

ORGANISATIONAL CONTEXT

Everyone needs a platform to launch a satisfying career. At Monash, we give you the space and support to take your career in all kinds of exciting new directions. You'll have access to quality research, infrastructure and learning facilities, opportunities to collaborate internationally, as well as the grants you'll need to publish your work. We're a university full of energetic and enthusiastic minds, driven to challenge what's expected, expand what we know, and learn from other inspiring, empowering thinkers. Discover more at www.monash.edu.

SensiLab is a dynamic, interdisciplinary research space established to address the contemporary research challenges of the Internet age. A joint initiative between the Faculty of Information Technology and Faculty of Art, Design and Architecture (MADA), the lab collaborates with researchers across the University and builds productive partnerships with leading industry, academic and cultural institutions. SensiLab aims to lead state-of-the-art research in generative design, digital music, Creative Artificial Intelligence and digital. Combining emerging and state-of-the-art technologies with creative vision, SensiLab imagines and builds future technologies and seeks to inspire the next generation of interdisciplinary researchers. You can find out more about the lab on our website: sensilab.monash.edu.

POSITION PURPOSE

A Level A research-only academic is expected to contribute towards the research effort of the University and to develop their research expertise through the pursuit of defined projects relevant to the particular field of research.

The successful appointee for this position will contribute to research as part of an Australian Research Council funded Future Fellowship in "Generative Materialism". Using innovative techniques that combine generative systems, advanced digital fabrication and the creative needs of modern design, this project seeks to boost human creativity by intelligently connecting the digital and physical processes of generative systems. The project aims to develop advanced creative methods and systems for the next generation of digital design and fabrication technologies applied to applications in art, design and architecture.

Modified date: April 2020

Reporting Line: The position reports to the senior academic

Supervisory Responsibilities: Not applicable

Financial Delegation: Not applicable

Budgetary Responsibilities: Not applicable

KEY RESPONSIBILITIES

Specific duties required of a Level A research-only academic may include:

- 1. The conduct of research under limited supervision either as a member of a team or, where appropriate, independently and the production or contribution to the production of conference and seminar papers and publications from that research
- 2. Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise
- 3. Limited administrative functions primarily connected with the area of research of the academic
- **4.** Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff
- 5. Occasional contributions to teaching in relation to their research project(s)
- **6.** Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures
- 7. Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental, school and/or faculty meetings and/or membership of a limited number of committees
- 8. Co-supervision of graduate research students in areas appropriate to the staff member's expertise

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have doctoral qualifications in the relevant discipline or a closely related field

Knowledge and Skills

- **2.** Demonstrated analytical and manuscript preparation skills, including a track record of refereed research publications
- **3.** Ability to solve complex problems by using discretion, innovation and the exercise diagnostic skills and/or expertise
- **4.** Well-developed planning and organisational skills, with the ability to prioritise multiple tasks and set and meet deadlines
- **5.** Excellent written communication and verbal communication skills with proven ability to produce clear, succinct reports and documents
- 6. A demonstrated awareness of the principles of confidentiality, privacy and information handling
- 7. A demonstrated capacity to work in a collegiate manner with other staff in the workplace
- **8.** Demonstrated computer literacy and proficiency in the production of high-level work using software such as Microsoft Office applications and specified university software programs, with the capability and willingness to learn new packages as appropriate

- 9. Software development experience in a major programming language (C++, Java, Python, etc.)
- 10. Experience with generative and computational design research and creative practice
- 11. The ability to work as part of a research team in an interdisciplinary research environment
- **12.** An understanding of aesthetic, creative and cultural issues involved in applying technology to creative practices

OTHER JOB RELATED INFORMATION

- Travel to other campuses of the University may be required
- There may be a requirement to work additional hours from time to time
- There may be peak periods of work during which taking of leave may be restricted

GOVERNANCE

Monash University expects staff to appropriately balance risk and reward in a manner that is sustainable to its long-term future, contribute to a culture of honesty and integrity, and provide an environment that is safe, secure and inclusive. Ensure you are aware of and adhere to University policies relevant to the duties undertaken and the values of the University. This is a standard which the University sees as the benchmark for all of its activities in Australia and internationally.