

# Position description

## Associate Professor, Software Engineering

<b>Department/Unit</b>	Clayton School of Information Technology
<b>Faculty/Division</b>	Faculty of Information Technology
<b>Classification</b>	Level D
<b>Work location</b>	Clayton campus
<b>Date document created or updated</b>	5 January 2017

### Organisational context

Monash is a university of transformation, progress and optimism. Our people are our most valued asset, with our academics among the best in the world and our professional staff revolutionising the way we operate as an organisation. For more information about our University and our exciting future, please visit [www.monash.edu](http://www.monash.edu)

The **Faculty of Information Technology** is represented on two campuses in Australia – Caulfield and Clayton – and in Kuala Lumpur, Suzhou and Johannesburg. It undertakes teaching and research across a broad range of information technology disciplines: computer science, computational science, data science, intelligent systems, software engineering, network computing (including distributed, wireless and mobile computing), information systems (including enterprise systems), business intelligence and decision support, multimedia computing and applications, information management (including archival and library systems), and knowledge management.

We are one of the few faculties of information technology in the world and one of the largest academic information technology units within a tertiary institution in the world. Its research-intensive, multidisciplinary, international capabilities provide it with a set of exciting teaching, research, and engagement opportunities that position it uniquely within the tertiary sector.

The Faculty has a strong commitment to providing the highest-quality learning opportunities for its students. It offers undergraduate, postgraduate coursework, and research degrees. At the undergraduate level, it offers 4 Bachelor degree programs. The Bachelor of Computer Science (with a specialization in Data Science), the Bachelor of Computer Science Advanced (Honours), the Bachelor of Information Technology (with majors in Business Information Systems, Computer Networks & Security, Games Development, Multimedia Development and Software Development), and the Bachelor of Software Engineering (Honours), a specialization within the Bachelor of Engineering (Honours). All four undergraduate degrees are accredited by the Australian Computer Society, while the BSE(Hons) is accredited by Engineers Australia. The appointee to this position will be expected to take a leadership role with the undergraduate Software Engineering program as well as the Software Development major in the Bachelor of Information Technology.

At the postgraduate level, the Faculty offers degrees that provide for the needs of (a) students who have undergraduate degrees in disciplines other than information technology and are seeking to learn more about information technology, and (b) students who have undergraduate degrees in the information technology field and wish to deepen their knowledge and skills in particular areas of information technology. Our postgraduate coursework programs include, the Master of Information Technology, the Master of Business Information Systems, the Master of Networks and Security, and the Master of Data Science, together with an online Graduate Diploma in Data Science. Software Engineering is a core unit with the Master of IT, and other software engineering units are electives in this degree. The Faculty's research degrees are designed to produce high-calibre scholars who are capable of cutting-edge pure or applied research in either academe or practice.

The Faculty strives to undertake high-quality, high-impact research. This research is structured around two centres.

- Centre for Data Science (ADD URL)
- Centre for Organisational and Social Informatics (ADD URL)

Four Research Flagship programs.

- Computational Biology
- Machine Learning
- Modelling, Optimisation and Visualisation
- IT for Resilient Communities

As well as strategic research initiatives in

- Sensilab (ADD URL)
- Immersive Analytics (ADD URL)

Research engagement is conducted through the Faculty's research centres and flagships, which provide staff and research students with opportunities to ground their work more firmly in the needs of industry, government, and the professions and to pursue commercialization possibilities. The faculty is now looking to build a much stronger research capacity in Software Engineering, with the successful applicant(s) leading this endeavor.

## Position purpose

The Associate Professor, Software Engineering will provide key support to establish and lead a high quality research team to work on systematic, disciplined, quantifiable approaches to the development, operation and maintenance that is, the application of software engineering.

The role will be expected to maintain and support outstanding research programs with relevance for and linkages to industry-focused programs. Provide support and maintain the School's drive for excellence in teaching, curriculum design and architecture, professional activities and policy development that underpin the discipline of Information Technology as aligned with the Faculty, University and the community.

The Associate Professor will also be active in the profession, have relevant industry networks and be willing to support or assume senior administrative functions.

**Reporting Line:** The position reports to the Head of the Clayton Campus

**Supervisory responsibilities:** N/A

**Financial delegation and/or budget responsibilities:** N/A

## Key responsibilities

1. The preparation and delivery of lectures, tutorials, practical and studio classes, demonstrations and workshops, as well as supervision of team-based software engineering projects
2. Initiation and development of course materials, including preparation and assessment of student assignments and examinations
3. Course coordination including offering guidance to assistant lecturers and supervision of sessional staff in teaching unit/s if required in Software Engineering
4. Consultation with students and supervision of PhD, honours and postgraduate students
5. Conduct of original research that will lead to publications in refereed journals or with high level academic or commercial publishers and attract external and government funding
6. Significant role in research project including, where appropriate, leadership of a research team
7. Actively contribute to partnering with industry in both education and research

8. Significant contribution to the profession and/or discipline both nationally and internationally

## Key selection criteria

### Education/Qualifications

1. The incumbent should possess:

- PhD in Software Engineering or a relevant field of Information Technology with significant relevant software engineering experience

### Knowledge and Skills

2. A strong publication record in high-quality journals or equivalent
3. Successful track record in obtaining external research grants
4. Record of successful supervision of postgraduate research students and the ability to make a significant contribution to postgraduate training programs
5. Demonstrated excellence in teaching in the relevant discipline area (i.e. through evaluations, innovation in presentation and through curriculum development)
6. Demonstrated ability to mentor staff and students
7. High level of interpersonal skills and a proven ability to establish good working relationships with colleagues, students and members of community and professional bodies
8. Demonstrated leadership in committees and other administrative work and portfolios
9. Proven ability to promote the discipline internally within the university as well as externally both nationally and internationally
10. Practical experience in information technology outside tertiary education including experience in the development of large software systems. Such systems might be commercial, open-source or research software

## Other job related information

- Travel (e.g. to other campuses of the University) may be required

## Legal compliance

Ensure you are aware of and adhere to legislation and University policy relevant to the duties undertaken, including: Equal Employment Opportunity, supporting equity and fairness; Occupational Health and Safety, supporting a safe workplace; Conflict of Interest (including Conflict of Interest in Research); Paid Outside Work; Privacy; Research Conduct; and Staff/Student Relationships.