



POSITION DESCRIPTION

School of Computing and Information Systems
Melbourne School of Engineering

Research Fellow/Senior Fellow in Process Mining (2 Positions)

POSITION NO	0045925
CLASSIFICATION	Research Fellow Grade 1 (Level A) Senior Research Fellow (Level B)
SALARY	Research Fellow: \$69,148 - \$93,830 p.a Senior Research Fellow: \$98,775 - \$117,290 p.a
SUPERANNUATION	Employer contribution of 9.5%
WORKING HOURS	Full-Time (1.0 FTE)
BASIS OF EMPLOYMENT	Fixed Term for 2 Years Fixed term contract type: Externally Funded
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
CURRENT OCCUPANT	New
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers , select the relevant option (‘Current Staff’ or ‘Prospective Staff’), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Professor Marcello La Rose Tel +61 3 8344 9887 Email Marcello.larosa@unimelb.edu.au <i>Please do not send your application to this contact</i>

For information about working for the University of Melbourne, visit our websites:
about.unimelb.edu.au/careers

Position Summary

The Research Fellow/Senior Research Fellow in Process Mining will contribute to the process mining research agenda of the Business Process Management (BPM) Team at the University of Melbourne. Topics of current interest include, but are not limited to, process variants and deviance diagnosis, predictive and prescriptive process monitoring, process discovery quality, and online process mining. The position will report to Prof. Marcello La Rosa. The successful applicant will have a background in computer science, information systems or related discipline, with a strong research track record in process mining and demonstrated knowledge of machine learning/data mining.

You will conduct independent and collaborative research, leading to the preparation and publication of research outcomes in premium conferences and journals, and the presentation of such outcomes to academic audiences. Where appropriate, you will work on research projects in collaboration with industry and government partners. You will also be expected to conduct co-supervision of research students directly related to your area of research.

You will be located in the BPM Team of the School of Computing and Information Systems in the Melbourne School of Engineering. The School of Computing and Information Systems is an international research leader in computer science and information systems. In these disciplines, the School was ranked number 1 in Australia and 14th in the world in the 2018 QS World University Ranking. You will be expected to be an active member of the School, collaborating with other researchers.

The Melbourne School of Engineering is strongly committed to supporting diversity and flexibility in the workplace. Applications for part-time or other flexible working arrangements will be welcomed and will be fully considered subject to meeting the inherent requirements of the position.

The University plan seeks to increase the diversity of the workforce and the representation of women in areas they have been traditionally under-represented. Consistent with this, the School is seeking to increase the representation of women in the academic workforce across engineering disciplines. Under a Special Measure, under Section 12 (1) of the Equal Opportunity Act 2010 (Vic) the School is seeking to lift the representation of women from 20% in 2014 to at least 25% over the next 5 years, and strongly encourages applications from suitably qualified female candidates.

1. Selection Criteria

1.1 ESSENTIAL

- ▶ PhD award or near completion in computer science, information systems or relevant discipline.
- ▶ A track record of quality research in process mining, as evidenced by research publications in leading conferences and journals commensurate with opportunity.
- ▶ Demonstrated ability to perform independent research in process mining.
- ▶ Demonstrated experience in designing and developing software prototypes for research purposes.
- ▶ Excellent ability in problem solving and critical thinking.
- ▶ Excellent written and verbal communication skills, demonstrated by presentation of research results at conferences, internal forums and through manuscripts preparation.

- ▶ Demonstrated capacity to communicate research concepts to non-technical audiences.
- ▶ Excellent interpersonal skills, including an ability to interact with internal university stakeholders (academic, administrative and support staff) in a courteous and effective manner.
- ▶ Demonstrated experience in using initiative, working with minimal supervision and ability to prioritise tasks to achieve project objectives within timelines.

1.2 DESIRABLE

- ▶ Experience in supervision of graduate students and/or research assistants.
- ▶ Knowledge of machine learning/data mining techniques.
- ▶ Experience in working on research consultancy projects with external partners (government or industry).

1.3 ADDITIONAL SELECTION CRITERIA FOR SENIOR RESEARCH FELLOW

- ▶ Extensive set of high-quality publications on process mining and business process intelligence.
- ▶ Experience in supervision of research students (e.g. PhD, MPhil).
- ▶ Demonstrated knowledge of machine learning/data mining techniques, as evidenced by publications in reputable forums.

2. Key Responsibilities

2.1 RESEARCH – ADVANCEMENT OF THE DISCIPLINE

- ▶ Independently plan and carry out research on process mining.
- ▶ Participate in preparation of manuscripts for publication in peer-reviewed conferences and journals.
- ▶ Liaise effectively with collaborators with a variety of internal and external stakeholders.
- ▶ Contribute to the development of the School's strong research program in business process management.
- ▶ Perform other duties as requested by the appointee's immediate supervisor.

2.2 ENGAGEMENT

- ▶ Active participation in some outreach activities relating to research and scholarship.
- ▶ Effective liaison with external networks to foster collaborative partnerships.
- ▶ Involvement in professional activities, including consultations and referrals.
- ▶ Present experimental results at local, national and/or international forums.
- ▶ Attend and actively participate in departmental seminars, meetings and/or committee memberships.

2.3 SERVICE AND LEADERSHIP

- ▶ Lead and contribute in the preparation and submission of competitive grant applications relating to the appointee's research program.
- ▶ Plan experimental programs and supervise the progress of research program of Research Fellows, Students and Research Assistants.

2.4 OTHER

- ▶ Perform other tasks as requested by the supervisor or the Head of the School.
- ▶ Undertake Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in Section 5.

3. Equal Opportunity, Diversity and Inclusion

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the University's People Strategy 2015-2020 and policies that address diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous desire to strive for excellence and reach the targets of Growing Esteem.

4. Occupational Health and Safety (OHS)

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

<http://safety.unimelb.edu.au/people/community/responsibilities-of-personnel>

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

5. Other Information

5.1 SCHOOL OF COMPUTING AND INFORMATION SYSTEMS

<http://www.cis.unimelb.edu.au/>

The School of Computing & Information Systems undertakes research and teaching across a range of information technology disciplines including Software Engineering, Information Systems, and Computer Science. It offers a comprehensive range of IT courses at all levels, including offerings in science, engineering, and business, and is at the forefront of computing research in Australia and internationally with close links to major computing research initiatives, including the Victorian Life Sciences Computing Initiative (VLSCI), IBM Research, the Microsoft Research Centre for Social Natural User Interfaces (SNUI), and DATA61 (formerly NICTA). It was ranked 13th in the 2016 QS World University Ranking exercise by discipline.

The School's aim is to attract and retain outstanding staff available in order to maintain a leading research and teaching. We have an existing highly successful research team in the area of the appointment, a large number of PhD students, and a substantial cohort of graduate students in our coursework Masters programs.

5.2 MELBOURNE SCHOOL OF ENGINEERING

www.eng.unimelb.edu.au/

The Melbourne School of Engineering is one of Australia's leading Engineering Schools and aims to be the school of choice for the highest performing students and research staff in Australia and within the Time Higher Education Supplement top twenty Schools of Engineering internationally by 2020.

5.3 THE UNIVERSITY OF MELBOURNE

The University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The University offers staff many benefits and prospective staff are encouraged to view the following web links:

www.unimelb.edu.au

www.growingesteem.unimelb.edu.au

www.unimelb.edu.au/careers

5.4 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at www.unimelb.edu.au/governance.