



RESEARCH FELLOW – MACHINE LEARNING

DEPARTMENT/UNIT	Data Science & AI
FACULTY/DIVISION	Faculty of Information Technology
CLASSIFICATION	Level B
WORK LOCATION	Clayton 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.

The **Faculty of Information Technology** aims to lead global IT research and education. Our strong reputation and international profile attracts the best students worldwide and we offer a range of accredited courses that transform our graduates into highly skilled and sought after IT professionals, equipped to work globally. Our research is multi-disciplinary, multi-campus and multi-national, giving us a unique capacity to reach out further and deeper than any other institution in Australia. Our research priorities are both technically ambitious and embedded in everyday life. To learn more about the Faculty and the exciting work we do, please visit our website: www.infotech.monash.edu.au.

POSITION PURPOSE

The Monash Faculty of IT is growing rapidly on its journey towards being one of the most renowned and highly regarded information technology research and technology centres in the world. A key component of this continued success is the establishment of a new, cutting-edge deep learning and AI research lab, guided by the Professor of Machine Learning.

An exciting opportunity exists for a talented and ambitious Research Fellow to become an integral member of this innovative team, working at the forefront of theoretical and applied machine learning by researching and applying leading-edge techniques such as generative deep learning, Bayesian nonparametrics and graphical models, optimal transport and process theory for machine learning with potential applications in computer vision, NLP, conversational AI, recognition detection/recognition and digital identity such as facial recognition. Other relevant topics include transfer learning and domain adaptation, deep reinforcement learning, imitation and meta-learning and alike. The outcomes of this exciting research position are expected to be published at the top-tier venues in machine learning such as NeurIPS, ICML, ICLR and top-venues in application areas such as CVPR, ICCV, ACL, and NAACL.

The Level B research-only academic is expected to carry out independent and/or team research within the field of image classification, and to carry out activities to develop their research expertise.

Reporting Line: This position will report to the lead of the Data Science and AI group

Supervisory Responsibilities: See key responsibilities

Financial Delegation: Not applicable

Budgetary Responsibilities: Not applicable

KEY RESPONSIBILITIES

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

1. The conduct of research either as a member of a team or independently and the production of conference and seminar papers and publications from that research
2. Supervision of research-support staff involved in the staff member's research
3. Guidance in the research effort of junior members of research-only Academic staff in their research area
4. Contribution to the preparation or, where appropriate, individual preparation of research proposal submissions to external funding bodies
5. Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise
6. Administrative functions primarily connected with their area of research
7. Occasional contributions to the teaching program within the field of the staff member's research
8. Co-supervision or, where appropriate, supervision of major honours or postgraduate research projects within the field of the staff member's area of research
9. 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

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
 - A doctoral qualification in the relevant discipline area; or
 - equivalent qualifications or research experience

Knowledge and Skills

2. Demonstrated statistical analysis and manuscript and research proposal preparation skills; including a solid track record of refereed research publications
3. Experience in successfully supervising, mentoring and coaching to support the development of research staff and/or a demonstrated trajectory of leadership capability
4. Experience in supervising and working with major honours or postgraduate students within the discipline
5. The ability to work both independently in a research environment and as part of an inter-disciplinary research team
6. High level organisational skills, with demonstrated capacity to establish and achieve goals
7. Excellent written and oral communication skills
8. Demonstrated capability in positively contributing to laboratory meetings and seminars

9. A demonstrated capacity to work in a collegiate manner with other staff in the workplace
10. Advanced computer skills with experience using Microsoft Word, Excel and PowerPoint; specific experience in working with a range of analytical software

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

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.