SENIOR RESEARCH FELLOW

DEPARTMENT/UNIT	Data Science and AI
FACULTY/DIVISION	Faculty of Information Technology
CLASSIFICATION	Level C
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 www.infotech.monash.edu.au/.

POSITION PURPOSE

This Senior Research Fellow position is for an exceptional incumbent to integrate a world-leading team in Machine Learning.

The intent is for the Fellow to lead the research project associated with a 'Discovery Project' funded by the Australian Research Council (DP190100017) to three chief investigators (Cis). The expectation is for the Fellow to take ownership of the project and progressively become a driver of the research team.

The aim of the project is to tackle what we call target-agnostic learning: How can we create machine learning models that are able to predict the value of any variable in the dataset? This contrasts with classification or regression where a single variable is pre-established as the target. Here we would like to draw predictions about any variable in the dataset, without deciding in advance what these variables are. This has for example critical applications in medical diagnosis and sensor networks. The position offers an incredible opportunity where the Fellow will open up a novel area of research in Machine learning.

The Fellow will integrate the CIs' team, which is a strong, lively and supportive environment with about 15 PhD students and 4 Research fellows. More generally, the position is about supporting the CIs' research effort in machine learning and there will be opportunities to focus on topics that might be of special interest to the Fellow.

Reporting Line: The position reports to the Chief Investigators

Supervisory Responsibilities: Not applicable

Financial Delegation: Not applicable

Budgetary Responsibilities: Not applicable

KEY RESPONSIBILITIES

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

1. The conduct of research and the production of conference and seminar papers and publications from that research

2. Supervision of research-support and administrative staff involved in the staff member's research

3. Supervision, where appropriate, of the research of less senior research-only Academic staff

4. Involvement, where appropriate, in the promotion of research links with outside bodies

5. Preparation of research proposal submissions to external funding bodies

6. Significant role in research projects including, where appropriate, leadership of research teams or management of projects

7. Responsibility for the oversight of financial management of grants received for their research projects

8. Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise

9. Occasional contributions to the teaching program within the field of the staff member's research

10. Supervision of major honours or postgraduate research projects within the field of the staff member's area of research

11. Various research-related administrative functions

12. 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 a major role in planning and committee work

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:

    - A doctoral qualification in Computer Science or equivalent qualifications or research experience

Knowledge and Skills

2. Demonstrated knowledge of development of machine learning theory and algorithms, including using graphical models

3. Demonstrated statistical analysis and manuscript and research proposal preparation skills; including a solid track record of refereed research publications

4. Proven track record of obtaining significant external grants for research

5. Experience in successfully supervising, mentoring and coaching to support the development of research staff and/or a demonstrated trajectory of leadership capability

6. Experience in supervising and working with major honours, postgraduate research projects and/or and the co-supervision of PhD students

7. The ability to work both independently in a research environment and as part of an inter-disciplinary research team

8. High level organisational skills, with demonstrated capacity to establish and achieve goals

9. Excellent written and oral communication skills, with excellent coding skills

10. Demonstrated capability in positively contributing to laboratory meetings, seminars and journal club meetings

11. A demonstrated capacity to work in a collegiate manner with other staff in the workplace

OTHER JOB RELATED INFORMATION

•   Travel to other campuses of the University may be required
•   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.