### ASSOCIATE PROFESSOR OF MACHINE LEARNING

- **DEPARTMENT/UNIT**: Data Science & AI
- **FACULTY/DIVISION**: Faculty of Information Technology
- **CLASSIFICATION**: Level D
- **WORK LOCATION**: Clayton campus

### ORGANISATIONAL CONTEXT

Monash is full of thinkers and doers who are looking for their next challenge. So if you’ve forged a rewarding career so far, this role provides the perfect platform to join us. You’ll have access to quality research facilities, infrastructure and teaching spaces to do exciting work, along with opportunities to collaborate internationally. You’ll be part of a university that’s made up of inspirational, challenging thinkers and doers – and continue doing work that makes a lasting impact. Discover more at [www.monash.edu](http://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 program and range of courses that transforms 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.monash.edu/it](http://www.monash.edu/it).

The Monash Precinct is the largest generator of scientific data in the southern hemisphere. Harnessing expertise in AI and data science from teams like the Machine Learning Group, we are unlocking the value of AI and big data, creating human interfaces with scientific computing and using analytics to improve efficiency and success of clinical trials. Monash has recently established the new Monash Data Futures Institute to better support and advance cross-University expertise in producing and leveraging data. A University-wide eResearch group provides world-leading infrastructure platforms for ML researchers.

Over the last 10 years Machine Learning has grown to become a fundamental technology driving innovations: Self-driving cars, Siri the iPhone personal assistant, Netflix movie recommendations, cancer diagnosis, discovery of physics’ laws and science progress. Our Machine Learning group covers methodologies and applications: Association discovery, Bayesian methods, Causal models, Classification, Deep learning, Forecasting, Images, Natural language, Semi-supervised models, Spatio-temporal, Text and Time series.
POSITION PURPOSE

Machine learning is the science behind big data, data mining, data science and artificial intelligence. It enables systems to learn from data, identify patterns and make decisions with minimal human intervention. An Associate Professor of Machine Learning is expected to make a significant contribution to all activities of the organisational unit and interdisciplinary area and play a significant role within their discipline. Academics at this level may be appointed in recognition of distinction in their disciplinary area.

Reporting Line: The position reports to the Machine Learning Subgroup Lead

Supervisory Responsibilities: This position provides direct and indirect supervision to research staff and PhD students

Financial Delegation: Not applicable

Budgetary Responsibilities: Not applicable

KEY RESPONSIBILITIES

Specific duties required of a Level D academic may include:

1. The preparation and delivery of lectures, tutorials, practical classes, demonstrations, workshops, and clinical sessions
2. Initiation and development of course materials
3. Course coordination including offering guidance to assistant lecturers and supervision of sessional staff in teaching unit/s if required
4. Consultation with students and supervision of PhD, honours and postgraduate students
5. Preparation and assessment of student assignments and examinations
6. 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
7. Significant role in research projects including, where appropriate, leadership of a research team
8. Significant contribution to the profession and discipline both nationally and internationally

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
   - A doctoral qualification and/or recognised significant experience in the relevant discipline area

In determining experience relative to qualifications, regard shall be had to teaching experience, experience in research, experience outside tertiary education, creative achievement, professional contributions and/or contributions to technical achievement. In addition, a position at this level will normally require a record of demonstrable scholarly and professional achievement in the relevant discipline area.

Knowledge and Skills

2. A strong publication record in high-quality journals or equivalent and outstanding contribution to Machine Learning
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 Machine Learning (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. 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 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
- A current satisfactory Working With Children Check is 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.