





Research Fellow (NVIDIA Monash Deep Learning Specialist)

Department/Unit

Faculty/Division

Classification

Work location

Date document created or updated

Monash e-Research Centre

Provost and Senior Vice-President, Officer of the Vice-Provost (Research and Research Infrastructure)

Level B

Clayton campus December 2017

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 Provost and Senior Vice-President is the Chief Academic Officer of the university and is responsible for: setting the university's academic strategy and priorities with the view to improving the education and research performance of the university; oversight of faculties, academic related portfolios and university wide centres and institutes; oversight of academic staffing including recruitment, development, reward and recognition, policies and procedures; strategic leadership for the delivery of academic programs; identifying and cultivating interdisciplinary areas of excellence and collaboration.

Monash eResearch Centre (MeRC) is a university commitment to accelerating research by applying advanced computing and information technology to important research problems. The centre partners with individual researchers, Australian research institutions and facilities and global research communities. MeRC is a leader amongst international eResearch initiatives and runs a number of national projects including the MASSIVE high performance computing facility, R@CMon - a node of the Australian Research Cloud, petascale data storage infrastructure, and the national Characterisation Virtual Laboratory. Staff at the Monash eResearch Centre deliver impact: we help visualise how the human brain is connected, we design high performance computing systems, we write data processing workflows for one-of-a-kind Australian microscopes, and we write smart software for interrogating unique data collections. MeRC is driven by the quality and passion of our staff, and the partnership with the researchers we work with. For more information about the work we do, please visit our website: <u>www.monash.edu.au/eresearch</u>

NVIDIA Corporation, (NVIDIA) is an American technology company based in Santa Clara, California. NVIDIA has a platform focused on four markets – gaming, professional visualization, data centres and auto, with a recent focus on artificial intelligence. Monash University will become the Australian node of the NVIDIA South East Asia Technology Centre.

Position purpose

The NVIDIA-Monash Deep Learning Specialist represents a collaborative effort between Monash University and NVIDIA to connect leading researchers at Monash and across Australia with the new research applications of NVIDIA technology with a particular focus on applying NVIDIA technology to instrumentation, real-time processing and medical imaging (including techniques such as CryoEM, X-Ray imaging, and MR), robotics and visualisation and smart cities and water management.

Employed by Monash and with staff level access at NVIDIA, the NVIDIA-Monash Deep Learning Specialist will be supported by both organisations and will act as a key point of knowledge exchange and collaboration.

A Level B research-only academic is expected to carry out independent and/or team research within the field in which he/she is appointed and to carry out activities to develop her/his research expertise relevant to the particular field of research.

Reporting Line: This position reports to the Director, Monash eResearch Centre

Supervisory responsibilities: Not applicable

Financial delegation and/or budget 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 her/his 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 her/his 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

- 1. The incumbent should possess:
 - a relevant doctoral qualification or have equivalent qualifications or research experience. In addition he/she may be expected to have had post-doctoral research experience which has resulted in publications, conference papers, reports or professional or technical contributions which give evidence of research ability
- 2. Demonstrated statistical analysis and manuscript preparation skills; including a solid track record of refereed research publications
- 3. High level organisational skills, with demonstrated capacity to establish and achieve goals
- 4. Excellent written and oral communication skills

- 5. Ability to work both independently and as part of a team
- 6. Demonstrated well developed computer literacy and proficiency in the production of high level work using software such as Microsoft Office applications and specified university software programs, with the capability and willingness to learn new packages as appropriate
- 7. Able to attend and contribute at laboratory meetings, seminars and journal club meetings as required
- 8. A demonstrated capacity to work in a collegiate manner with other staff in the workplace

Other job related information

- Travel (e.g. to other campuses of the University, conferences, workshops) may be required
- There may be peak periods of work during which the 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