POSITION DESCRIPTION

Position Title: Research Fellow
Organisation Unit: School of Information Technology & Electrical Engineering
Position Number: 3011901
Type of Employment: Full-time, Fixed term
Classification: Academic Level B

THE UNIVERSITY OF QUEENSLAND

The University of Queensland (UQ) contributes positively to society by engaging in the creation, preservation, transfer and application of knowledge. UQ helps shape the future by bringing together and developing leaders in their fields to inspire the next generation and to advance ideas that benefit the world. UQ strives for the personal and professional success of its students, staff and alumni. For more than a century, we have educated and worked with outstanding people to deliver knowledge leadership for a better world.

UQ ranks in the world's top universities, as measured by several key independent ranking, including the Performance Ranking of Scientific Papers for World Universities (43), the US News Best Global Universities Rankings (52), QS World University Rankings (47), Academic Ranking of World Universities (55), and the Times Higher Education World University Rankings (60). UQ again topped the nation in the prestigious Nature Index and our Life Sciences subject field ranking in the Academic Ranking of World Universities was the highest in Australia at 20.

UQ has an outstanding reputation for the quality of its teachers, its educational programs and employment outcomes for its students. Our students remain at the heart of what we do. The UQ experience – the UQ Advantage – is distinguished by a research enriched curriculum, international collaborations, industry engagement and opportunities that nurture and develop future leaders. UQ has a strong focus on teaching excellence, winning more national teaching excellence awards than any other in the country and attracting the majority of Queensland's highest academic achievers, as well as top interstate and overseas students.

UQ is one of Australia’s Group of Eight, a charter member of edX and a founding member of Universitas 21, an international consortium of leading research-intensive universities.

Our 50,000-plus strong student community includes more than 13,000 postgraduate scholars and more than 12,000 international students from 144 countries, adding to its proud 240,000-plus alumni. The University has about 7,000 academic and professional staff and a $1.8 billion annual operating budget. Its major campuses are at St Lucia, Gatton and Herston, in addition to teaching and research sites around Queensland and Brisbane city. The University has six Faculties and four University-level Institutes. The Institutes, funded by government and industry grants, philanthropy and commercialisation activities, have built scale and focus in research areas in neuroscience, biomolecular and biomedical sciences,
sustainable minerals, bioengineering and nanotechnology, as well as social science research.

UQ has an outstanding track-record in commercialisation of our innovation with major technologies employed across the globe and integral to gross product sales of $11billion+ (see http://uniquest.com.au/our-track-record).

UQ has a rapidly growing record of attracting philanthropic support for its activities and this will be a strategic focus going forward.

**School of Information Technology & Electrical Engineering**

It is an exciting time to get involved with the School of Information Technology and Electrical Engineering, located on UQ's St. Lucia campus. The School is ramping up its investment in teaching, research and engagement to create an inspiring, diverse and flexible workplace. The direction is backed by a bold, new strategic vision to ensure the School is at the forefront of meaningful research outcomes and pedagogy across its core impact areas of health, data, automation and energy. Boasting strong student enrolments in professionally accredited programs, combined with world-class researchers and facilities, the School is focused on strengthening its position in the global computer science and engineering communities. By attracting the brightest minds and fostering a truly innovative and collaborative work environment, the School will develop global solutions to contemporary issues and mentor the leaders of tomorrow.

Details of the School may be accessed on its website at [http://www.itee.uq.edu.au/](http://www.itee.uq.edu.au/).

**Information for Prospective Staff**

Information about life at UQ including staff benefits, relocation and UQ campuses is available at - [http://www.uq.edu.au/current-staff/working-at-uq](http://www.uq.edu.au/current-staff/working-at-uq)

The University of Queensland [Enterprise Agreement](http://www.uq.edu.au/current-staff/working-at-uq) outlines the position classification standards for Levels A to E.

The School recognises and values equity and diversity, and encourages applications from any individual who meets the requirements of this position irrespective of gender, sexuality, race, ethnicity, religion, disability, age or other protected attributes. The School strives to provide an inclusive working environment, and along with the University is committed to supporting staff with family and caring responsibilities by providing policies, programs and initiatives to help balance work and family responsibilities.

**DUTY STATEMENT**

**Primary Purpose of Position**

The primary purpose of this position is to participate in a research project on Digital Pathology being conducted within the Security and Surveillance Research Area.

Researchers included in this Australian Research Council (ARC) funded project are Prof. Brian Lovell (School of Information Technology and Electrical Engineering), as well as a number of full-time Research Fellows and PhD students.

The role of the Research Fellow is to participate in innovative research developments, conduct original research within the general scope of computer vision and pattern recognition, provide research input to other staff and RHD students where relevant,
participate and/or lead interactions with industry and research collaborators, and provide support in literature review and research document preparation.

Duties

Duties and responsibilities include, but are not limited to:

Research
- Investigation towards evaluation of existing solutions in the area of Digital Pathology
- Research of generic problems within the scope of the project
- Prepare research publications and progress reports
- Publish scholarly papers in high quality refereed international journals, books and conference proceedings.
- Participate in regular meetings to discuss project objectives, methodology and outcomes.
- Applicants interested to build a teaching portfolio will have opportunity to participate in UQ’s ResTeach scheme (details at www.uq.edu.au/teaching-learning)
- Actively seek research funding from internal and external sources including the Commonwealth research granting agencies, the state government and industry.

Service and Engagement
- Perform research functions in the School.
- Foster relations with industry, government, professional bodies and the wider community.
- Any other duties as reasonably directed by your supervisor

Other
Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including but not exclusive to:

- the University’s Code of Conduct
- requirements of the Queensland occupational health and safety (OH&S) legislation and related OH&S responsibilities and procedures developed by the University or Institute/School
- the adoption of sustainable practices in all work activities and compliance with associated legislation and related University sustainability responsibilities and procedures
- requirements of the Education Services for Overseas Students Act 2000, the National Code 2007 and associated legislation, and related responsibilities and procedures developed by the University

Organisational Relationships
The position reports to Prof. Brian Lovell in the School of Information Technology and Electrical Engineering.
SELECTION CRITERIA

**Essential**
- PhD in the area of Engineering, Computer Science or an equivalent discipline.
- Demonstrated track record in high quality research, as demonstrated by publications in high-ranking refereed journals.
- Deep understanding of computer vision and pattern recognition techniques.
- Broad knowledge of industry solutions and tools in digital pathology and microscopy.
- Knowledge of issues and challenges of building working software with strong skills in computer programming with MATLAB, Python and C/C++ and software prototyping.
- Demonstrated experience in digital pathology or related fields.
- Demonstrated ability to work collaboratively with colleagues in projects, including the ability to work with end-users of research such as industry partners.
- Ability to effectively supervise research higher degree students.
- Demonstrated high-level written and oral communication skills including the ability to write technical reports.

**Desirable**
- Knowledge of statistical techniques for deep learning and image captioning.
- Publication of research findings in tier 1 peer reviewed journals/conferences such as TPAMI, TIP, PR / ICCV, CVPR, ECCV, WACV etc.

**Qualification Verification**
An appointment to this position is subject to the verification of the highest academic qualification from the conferring institution.

The University of Queensland values diversity and inclusion and actively encourages applications from those who bring diversity to the University. Please refer to the University’s Diversity and Inclusion webpage (http://www.uq.edu.au/equity) for further information and points of contact if you require additional support.

Accessibility requirements and/or adjustments can be directed to the contact person listed in the job advertisement.