POSITION DESCRIPTION

Position Title: Lecturer/Senior Lecturer in Signal Processing
Organisation Unit: School of Information Technology & Electrical Engineering
Position Number: New
Type of Employment: Full-time Continuing
Classification: Academic Level B or Level C

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 (45), the US News Best Global Universities Rankings (52), QS World University Rankings (51), 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 secured a greater share of Australian Research Council grants in 2016 ($24.5 million) than any other university nationally.

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 230,000-plus alumni. The University has about 7,000 academic and professional staff and a $1.7 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 will have further success in this area as an important strategic aim 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/.

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

The University of Queensland Enterprise Agreement 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

To engage in research activities of the school, focusing on signal processing in the context of microwave and photonics research and to contribute to teaching, course coordination and student supervision.

We seek to appoint an enthusiastic team player who can operate at the leading edge of research with interest in applying and developing new signal processing techniques well suited to advance the school's microwave and photonics systems.
**Duties**

Duties and responsibilities include, but are not limited to:

**Research**
- Conduct research and publish scholarly papers in high quality refereed international journals, books and conference proceedings.
- Actively seek research funding from internal and external sources including the Commonwealth research granting agencies, the state government and industry.
- Develop a program of fundamental, applied and contract research within the School.
- Develop joint research projects with colleagues and postgraduates.

**Teaching and Learning**
- Teach into undergraduate and postgraduate courses in Electrical Engineering especially in signal processing and communications related courses.
- Supervise students, including coursework and higher degree research students.
- Initiate and develop course material and coordinate courses.
- Provide effective academic advice to students.
- Provide support for other academic staff during absences.
- For Level C, provide leadership in developing courses and programs.

**Service and Engagement**
- Perform academic service functions in the School.
- Participate in School decision-making and serve on School committees.
- 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 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 the Head of the Photonics and Microwave Engineering Group or designated Supervisor.

SELECTION CRITERIA

**Essential**

- PhD in the area of Electrical Engineering, Computer Science or an equivalent discipline.
- Demonstrated track record in signal processing research.
- Demonstrated ability to solve signal processing problems in practice.
- Ability to work collaboratively with colleagues especially in multidisciplinary projects.
- High-level of effective communication and interpersonal skills.
- Ability to relate to students.

**Level B**

- Demonstrated expert knowledge in a relevant discipline and ability to develop innovative research programs in the field.
- Established record of publication in high-ranking refereed journals.
- Demonstrated record of competing for research funding.
- Demonstrated capacity for teaching in a relevant discipline.

**Level C**

- Demonstrated expert knowledge in a relevant discipline and ability to develop innovative research programs in the field.
- National recognition and a developing international profile for research in the field through publication in high-ranking refereed journals.
- Demonstrated capacity to obtain and successfully manage external research funds, including contributions as a chief investigator and collaborations which yield new insights and opportunities.
- Evidence of course co-ordination and effective teaching in a relevant discipline

**Desirable**

- Experience in working with signals from microwave and/or photonics sensing and imaging systems.
- Knowledge of applied electromagnetics for photonics or microwave applications.
- Experience developing and maintaining collaborative relationships with industry stakeholders.

**Level B**

- Knowledge of alternative modes of teaching.
**Level C**

- Experience in liaising and collaborating with external agencies to develop co-operative research initiatives; and
- Track record of effective teaching (undergraduate/graduate).

**Seminar**

Applicants invited for interview may be expected to present a seminar in conjunction with the selection interview process.

**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.

Applications are encouraged from women.