POSITION DESCRIPTION

Junior Embedded Systems Engineer

Position Level 4
Faculty/Division Science
Position Number 00184595
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Position Summary
The Junior Embedded Systems Engineer works with world-leading atomic electronics and quantum computing teams at Silicon Quantum Computing Pty Limited (SQC) and the Australian Centre of Excellence for Quantum Computation and Communication Technology (CQC²T or Centre) based at UNSW Sydney.

The Junior Embedded Systems Engineer provides routine support, under guidance from the wider Embedded Systems Engineering team, to assist with the development and testing of high-performance FPGA based quantum control instrumentation within SQC.

This position reports to the Embedded Systems Engineering Lead and works alongside other staff and students funded by SQC. This role does not have any direct reports.

Responsibilities
Specific accountabilities for this role include:

• Under the guidance and direction from Senior Hardware / FPGA / Embedded Software Engineers, assist with developing, using and testing custom high-performance FPGA based quantum control systems and associated hardware/instrumentation.

• Assist with preparing documentation.

• Use judgement to solve similar problems using previously learned methods, procedures, precedent, practices, and experience.

• Work collaboratively with colleagues as part of an agile team of Embedded Systems Engineers to carry out tasks.

• Align with and actively demonstrate the UNSW Values in Action: Our Behaviours and the UNSW Code of Conduct.
• Cooperate with all health and safety policies and procedures of the university and take all reasonable care to ensure that your actions or omissions do not impact on the psychosocial or physical health and safety of yourself or others.

Skills and Experience
• Completion (or partial completion) of an Electrical Engineering qualification and/or relevant work experience (including experience gained in parallel with undertaking parttime study)
• Demonstrated embedded systems hands-on experience (C, C++, Python, VHDL, Verilog, FPGA, microcontrollers, PCB design) gained as part of formal education projects or in the form of personal projects.
• Ability to plan the scope of a project and communicate technical information clearly.
• Well-organised, attention to detail and ability to meet deadlines.
• Demonstrated ability to work effectively in a multidisciplinary team.
• An understanding of and commitment to UNSW’s aims, objectives and values in action, together with relevant policies and guidelines.
• Knowledge of health and safety (psychosocial and physical) responsibilities and commitment to attending relevant health and safety training.

About this document
This Position Description outlines the objectives, desired outcomes, key responsibilities, accountabilities, required skills, experience and desired behaviours required to successfully perform the role.

This template is not intended to limit the scope or accountabilities of the position. Characteristics of the position may be altered in accordance with the changing requirements of the role.