Job Description

CREST
ROBOTICS

JOB TITLE: Senior Software Engineer

JOB TYPE: Full-time or 0.9 FTE

LOCATION: Office located at Cicada Innovations, 4 Cornwallis St Eveleigh NSW 2015 (short walk from Redfern station).

HOURS: 9-day fortnight (~8.4 hrs per day, or normal 7.6 hrs on 0.9 FTE), every second Friday is a Rostered Day Off (RDO).

SUPERVIROR/MANAGER: Dr. Clyde Webster

Crest Robotics is seeking a Senior Software Engineer with experience delivering software for real-time robotic and mechatronic systems. In this position you'll lead, work closely with, and be responsible for a small, highly technical software team and their deliverables. The team work on software to deploy on robotic hardware, including our custom-designed and manufactured legged robots and manipulators.

You must have demonstrable experience with software project management and delivery, good decision-making ability, and be able to communicate very effectively with the software and the wider team. A strong working knowledge of robotic software from a system level is required, including soft real-time control, sensor integration, estimation, and algorithms for planning, perception, and control.

MAIN DUTIES/RESPONSIBILITIES:

- Lead software project management, prioritising work amongst a small team to deliver projects on time.
- Contribute towards discussions on requirements, scope, timeline, etc.
- Communicate and work with the wider team (e.g. mechanical, electrical).

You will lead the team responsible for:

- Development of software stack for a wheeled-legged robot with manipulator, with a view to generalise the software stack across multiple unique platforms.
- Integration of control software with motor controllers in "soft real-time" linux machine.
- Evaluation of controller and trajectory optimisation designs in simulation and in hardware tests.
- Manage test and evaluation of robotic subsystem- and system-level tests.
- Integrating with commercial/open-source off-the-shelf localisation/mapping solutions.
- Design and implementation of user interfaces for commanding/controlling the robot.

23 February 2026

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SKILLS & EXPERIENCE

Qualifications: Bachelor's Degree in either Mechatronics Engineering, Software Engineering or other appropriate field, and a master's, PhD or significant experience relevant to the development of robotic systems.

Experience: A minimum of 5 years' experience in software engineering and/or robotic systems development.

Skills:

- Proven experience delivering software for hardware projects (not just simulation). Experience with legged robots and manipulators desirable.
- Excellent verbal and written communication required.
- Experience in integration of software with hardware required.
- Proven experience in delivering functional, maintainable and robust software to safety critical systems.
- Strong C++, python, ROS, and git skills required.
- Strong understanding of robotics theory, e.g. footstep planning, gait generation, mapping and localisation, navigation, etc.
- Experience with dynamic control and/or trajectory optimization, particularly in solving practical optimization problems for control.
- Experience with real-time Linux desirable
- Experience with alternative middleware (e.g. LCM) desirable
- Experience with deep learning and/or reinforcement learning desirable.
- Experience with computer vision desirable.
- Sensor simulation skills (e.g. RGBD camera, LIDAR) desirable

    Even if you don't meet **all** of the listed criteria, we'd still love to hear from you.

APPLCATION

Please submit application to jobs@crestrobotics.co

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