FARMBOT
MONITORING SOLUTIONS

POSITION DESCRIPTION

Position Title:	***Senior Embedded Software Engineer***
Location:	Roseville, Sydney, NSW
Position Type:	Full-Time Permanent
Reports to:	*Lead Embedded Software Engineer*
No. of Direct Reports:	0
Date:	20/2/2026

What is Farmbot?

Farmbot is a fast-scaling Australian AgTech company helping farmers transform how they monitor and manage water across vast, remote agricultural properties. With thousands of monitors in the field and growing, our near real-time monitoring systems deliver timely insights about water infrastructure, helping customers improve productivity, prevent losses, and make better decisions—whether they're managing tanks, bores, troughs, or pumps.

Farmbot's core focus is in water for livestock and has high adoption in cattle and sheep grazing activities across Australia. It has now expanded its core water monitoring offering to a range of its own and other third-party technology, including sensors for rainfall, flow, pressure, cameras, pump control, trough monitors and more.

We design, build, and support rugged, low-maintenance IoT devices that transmit data over satellite, cellular, and other long-range networks to our cloud platform. Our end-to-end solutions work straight out of the box, often in the most remote parts of Australia—and increasingly, the world.

We're building the next generation of smart on-farm infrastructure, integrating sensors, controllers, and predictive analytics. Join us as we expand what's possible in connected agriculture.

Purpose of the Role

We're seeking an experienced **Senior Embedded Software Engineer** to take ownership of Farmbot's embedded platform -powering our growing portfolio of low-power, ruggedised IoT products. You will be involved in firmware architecture, development, testing and release, working alongside product, hardware, and cloud teams to bring new sensing and control capabilities to life.

About you

You're a natural self-starter who takes ownership of outcomes, not just code. You're comfortable balancing deep technical work with high-level systems thinking and enjoy working closely with cross-functional teams to deliver meaningful products.

You thrive in fast-paced environments, bring a solution-oriented mindset, and are excited by the opportunity to help shape the firmware direction of a growing AgTech company.

You're a confident embedded systems developer who writes clean, maintainable, and scalable code. You're **proficient in C++**, including the use of **templates and object-oriented programming techniques**, and can apply these principles effectively within resource-constrained embedded environments.

You're just as comfortable deep-diving into FreeRTOS and communication protocols as you are stepping back to map out a firmware roadmap or mentoring a junior engineer.

Bonus points if you have had experience working in a startup environment on an IoT product.

Due to the nature of the work, we are only looking to hire candidates who are willing to base themselves in Sydney.

Key Responsibilities

- Design, develop, and support of embedded firmware on new and existing Farmbot products using **modern C++ (including templates and object-oriented patterns)** on ARM Cortex-M devices with FreeRTOS
- Ensuring the embedded solutions are robust, reliable and maintainable
- Collaborate with engineers (both in-house and 3rd party) on functional electronic design (requirements specification), validation and testing
- Contribute to the firmware release pipeline and contribute to continuous integration and test frameworks
- Perform **real-world testing** and validation of embedded systems, going beyond unit tests to ensure robustness in field conditions; actively participate in **end-to-end QA**, collaborating closely with software and QA teams to identify and resolve async issues and edge-case behaviours that require deep firmware insight
- Document architecture, design decisions, and interface specifications
- Support field deployments and customer escalations as needed
- Provide technical leadership in the firmware space

Desirable Experience and Skills

You will bring:

Embedded Skills

- 5+ years experience in embedded firmware development using C/C++ on ARM Cortex-M. Familiarity with NXP and STM32 microcontrollers is a big plus
- Must be proficient in the use of C++ templates and object-oriented code
- Device driver design and implementation
- Ability to write memory-efficient code
- Solid experience with FreeRTOS, MCUExpresso, Visual Studio or similiar
- Strong experience with hardware interfaces (SPI, I2C, UART), and low-level driver development
- Experience with telemetry/IoT systems, edge processing, and **low-power design**
- Familiarity with satellite comms (Globalstar, Inmarsat), cellular radios (NB-IoT/Cat M1), Bluetooth and LoRa is desirable
- Experience working across full development lifecycles: prototyping, testing, field deployment, and post-launch support

Electronics

- Strong conceptual electronics knowledge; able to read and interpret schematics
- Use of test equipment such as an oscilloscope and logic analyser to debug embedded systems

Other Skills

- Python and or C# is an advantage. Typically for the development of test beds and development support software
- Strong mathematical grasp, experience with time domain analysis/representation
- Capable of producing detailed technical requirements documentation
- Experience with CI/CD practices
- Familiarity with AWS services, Bitbucket, Confluence and Jira
- A collaborative nature with strong communication skills

We have an agile approach to all aspects of Farmbot's product development and operations, and we look to all team members to provide input and ideas to continually improve every aspect of the business. This is an opportunity to take a key role in a truly innovative company that is creating unique solutions and services for agriculture, and to develop your skills and be part of our rapidly growing company. Your desire to learn and flexibility to work in a fast-paced environment will contribute to your success.

Be part of a team that is creating the next generation of monitoring and control systems for the world's agricultural industries.

For more information in confidence, please email Esa Attia at esa.attia@farmbot.com.au