Position: **Systems Architect – Product Development**

Reporting to: VP Product Development

Direct reports: None

Ideal candidate:

- Have at least 10 years professional experience across hardware, software, networking, database, cloud and systems design.
- Experienced with the Scrum framework for agile development
- Demonstrated experience mentoring other engineers in best practise approaches to design, development and testing.
- Have a strong voice in team meetings, prepared to share opinions and expertise, challenge and be challenged
- Capable of receiving an under-defined task, bring clarity to the task, and accomplish the task with high quality.
- Excellent communication skills, capable of professionally interacting with other teams.
- Demonstrated experience in leading projects within an engineering / development team
- Demonstrated strength in embedded firmware and hardware development, and highly available cloud software development
- Familiar with ARM Cortex microcontrollers, Linux, AWS
- Degree or qualification in Electronic Engineering, Computer Science, or similar
- Extremely competent in C, C#, SQL and javascript
- Familiar with instrumentation and measurement

Purpose of role:

The primary objective of the role is to lead design and quality improvement projects that relate to the architecture of our hardware, firmware, software, cloud and networking systems. To do this effectively you will need to gain expert knowledge of our platform across the hardware / software stack, have an affinity for quality and building best practise quality systems, be able to mentor other engineers and build high performing teams.

Initially you will be hands on, working with the embedded systems and automated test infrastructure, and building the capability within the product development team through the coaching and mentoring of team members. In the medium term you will take on the oversight of our Cloud development programme, working with our key contractor to ensure we continue to deliver high quality Cloud services. Longer term you will build our capacity and capability in the area of Cloud services development.

In support of this objective there are four areas of responsibility:
    (1) Systems architecture
    (2) Technical leadership
    (3) Capability building and mentoring
    (4) Quality

Key responsibilities:

1. <u>Systems architecture</u>
- Design, implement, and effectively communicate systems architecture to various technical and non-technical groups both written and verbally. Keeping accurate records of steps and decisions taken.
- Establishing and defining architectural principles and coding standards across the enterprise taking responsibility for architectural governance over systems and software plans

- Ensuring that a maximally robust design is developed following sound security and technology best practices.
- Monitoring performance, security and scalability of systems and helping with troubleshooting and diagnosis.

2. Technical leadership
- Identify and close knowledge gaps relating to new developments
- Provide high level input as a member of a project team
- Technical lead on software, firmware and hardware related projects (initially), responsible for design, implementation, and continuous improvement of our platforms

3. Capability building and mentoring
- Mentor members of the development team as we continue to develop our Scrum for Hardware processes, using your experience to apply the agile software principles to the challenges of hardware development
- Participate in the recruitment of new talent, helping to determine the scope of new roles, assessing the technical capability of potential candidates and the team fit.

4. Quality
- Continuously raise the bar on the quality of our products, implementing best practise approaches to the architecture, development and testing of our platforms.
- Train the development team up to take over ownership (maintenance and future development) of the quality systems that apply their work area (embedded systems).
- Develop quality systems for the Cloud services.
- As part of the development team, ensure all work conforms to our quality standards.

Key relationships:

- VP Product Development: overall direction and support for the role, including product and project specification, project prioritisation, technical support, and the provision of tools and systems
- Product Development Team: work alongside other team members, providing and seeking support as required
- Cloud Software Contractor: for further development on the Cloud platform
- CTO: for product and project specification and technical support
- GM Manufacturing: for input into design for manufacture and production work instructions
- Production Engineer: for input into design for manufacture and production work instructions
- VP Sales and Marketing: for input into end user requirements, product and project specification