Principal Software Engineer

Join us in our mission to pave the new way of thinking for crane lifting and logistics

At Roborigger, you will be a part of an exciting Perth-based company that is now going international. Roborigger is a rapidly expanding company with products that improve safety and increase efficiency. We have a range of products that include the original load controlling device as well as our internet-connected data collection, logistic management and planning software, and input devices. We are at the forefront of the technologies that will transform the construction and resources industries.

The Roborigger product was originally developed by TENSA Equipment and Roborigger products are now in a separate entity (Roborigger International Pty Ltd) with external investors, including TENSA Equipment as a major shareholder. TENSA Equipment has successfully been building fully certified lifting and drilling equipment for the global offshore oil and gas industry for over 10 years and is still supplying products and services for this industry. Roborigger inherits this breadth of experience and longevity – we are here for the long haul.

Our focus is now on developing our manufacturing and support capabilities worldwide. We need people who enjoy the challenge of walking on new ground with new ideas and implementing systems that achieve the highest standards in efficient ways.

About the role

We are looking for a Principal Software Engineer to oversee Roborigger software and control systems. This covers:

- Onboard microcontroller and software (embedded C++)
- Onboard management computer (Linux)
- Software on AWS based IOT application

Must be able to prepare detailed work scopes and product roadmap in the above. The candidate is expected to be the primary code developer and maintainer for the Roborigger product.

The candidate must have experience with the commonly used software environments to be able to choose the appropriate development environments for the different aspects of the products. (eg C++, Python, Linux, Windows, Android etc)

Onboard microcontroller and software

Must have a good up to date knowledge of available microprocessors and the industry standards for software programming. The majority of the software programming may be done by others but the candidate must be able to program proficiently and have a good knowledge of best practices to manage this.

The candidate must be experienced in programming control systems for machinery or electromechanical products in a safety-critical environment.

The candidate must have a good understanding of sensors and interfaces appropriate to product design. Experience with using data from accelerometers and gyros is essential.

Onboard computer and IOT system

Roborigger has a Linux based management computer that undertakes edge processing and communicates data to the IoT monitoring package. This system interacts with the onboard control and electrical systems and sensors. Candidate must have a strong knowledge of Linux, IP communications protocols and interaction

with IoT systems.

Must be up to date with available AI hardware solutions for edge devices and able to select specify and manage the implementation of new processor platform, sensors and interfaces.

Knowledge of AI systems would be an advantage – eg Tensorflow, OpenCV and equivalents etc.

Knowledge of Android would be beneficial.

New product development

Understand the state of the art technology such as LoRa, HaLow and radio communications.

Provide software input to the development of inhouse long-range remote control and advanced autonomous control.

General

The candidate must stay abreast of the latest developments in the product space and must be able to demonstrate interaction with peers on technical issues. It is expected that the candidate would be a member of Engineers Australia and attend EA or equivalent technical functions. The candidate will be required to interact with a multi-disciplined product team consisting of software engineers, mechanical engineers, operations and training personnel. Communication skills are important.

The candidate must have a strong commercial sense and understand the business needs. The candidate must be able to document the work in a highly methodical and consistent manner and be able to provide documentation that will allow troubleshooting, maintenance and repairs to be undertaken by service personnel worldwide.

Where you will be working

The work will be generally located at our assembly and service facility in Wangara, WA. The work will also involve visits to sites when supporting the equipment.

Qualifications

The candidate must have software, electrical or electronics university bachelors degree or higher.

Skills and Experience

The candidate would be expected to have more than 5 years of experience in the above areas. (If the experience level is less than this, the candidate will still be considered if experience is highly relevant)

Experience in an environment where electrical and electronic components are designed, manufactured and tested is preferred.

How to apply

If this sounds like you and the opportunity you are looking for, apply now.

Please submit written applications to Derick Markwell, Managing Director, and include your resume and a cover letter outlining how you meet the job requirement. Email: **hr@roborigger.com.au**