



SeaStar Solutions

Job Title:	Software Development Engineer
Job Purpose:	This position focuses on product development including design, verification, validation, launch and support of products and components used in boat control and heavy duty transportation heating products. Develop embedded software solutions to meet functional requirements.
Reports To:	Chief Engineer
Direct Reports:	N/A
Version:	Mar 11, 2016

Education & Experience

- University or Institute qualifications in Electrical, Electro-Mechanical, Software Engineering, or Computer Science.

Responsibilities

- Participate in full embedded software development life cycle: from requirement analysis, design, implementation, validation, documentation, deployment, and ongoing support.
- Prepare software design documentation for new products in accordance with company standards.
- Work with design leader and agile development team in the iterative development process of agile sprint planning, design, documentation, and test in accordance with the scrum methodology.
- Participate in the development of software requirement specifications, system architecture design, and functional design specifications
- Develop embedded software solution in accordance with the defined system architecture.
- Coordinate and participate in software design and code reviews.
- Develop and execute functional test plans to ensure software fully meet functional design specifications.
- Develop test software and test scripts to interface to devices or instruments if required.
- Execute software unit testing, and integration testing. Participate in system testing, and field testing.



- Evolve the software engineering practice within the organization, including reporting, tools, best practices, and development methodology.
- Work with cross-functional product development teams that include design engineering, program and product management, manufacturing engineering, supply chain management, and production.
- Interact with customers and suppliers and represent SeaStar Solutions.
- Assist in applications support and troubleshooting as required.

Skills & Abilities

- Strong proficiency with embedded software design, development, validation, and documentation.
- Excellent and disciplined software design and programming skills in C / C++.
- Strong problem-solving abilities is a must
- Understanding of hardware system design and hardware / software interfaces.
- Knowledge of real-time design and embedded operating systems.
- Development experience with safety critical embedded systems a plus.
- Experience with a variety of microcontrollers, and embedded development tools a plus.
- Familiarity with various bus protocols and interfaces (e.g. CAN, SPI, I2C, USB, RS232, Bluetooth)
- Working experience with CAN and communication protocols such as J1939, NMEA2K, CANopen is a strong asset.
- Familiarity with UML, object oriented programming, and design patterns.
- Familiarity with motor control, temperature control, sensor, and motor technologies is a strong asset.
- Working experience with the agile development process is a strong asset.
- Familiarity with version control system such as SVN and issue tracking system such as JIRA a plus.
- Experience with Labview, DAQ systems, Matlab, Simulink, and model based design a plus.
- Familiarity with QFD, Design and Process FMEAs a plus.
- Proficiency with engineering tools such as oscilloscope, multimeter, signal generator, logic analyzer, etc.
- Ability to work well independently and as part of a strong team.
- Strong proficiency with MS Office and ability to use other programs such as MS Visio, MS Project.
- Well-developed organizational skills with the ability to manage a variety of tasks.



- Excellent verbal and written communication skills in English
- Must have real world experience working with individuals of diverse backgrounds and a respect for difference.
- Professional demeanor whether in person, via email or on the telephone.

Deliverables

- Software design, verification, validation, launch and support of products and components.
- Develop software sprint plan, functional design specifications and diagrams, test specifications, design review, and other design documents for internal and external customers.
- Validate software solutions through unit testing, integration testing, system testing, and field testing.
- Work with supervisor, project stakeholder, and agile team members to establish and review project milestones, agile sprint plans, and sprint deliverables.

Things to Know & How to Apply?

- Occasional travel maybe required.
- SeaStar Solutions is an equal opportunity employer.
- If you are interested in this position, please send your cover letter and resume to hr.canada@seastarsolutions.com with the subject: 2018-017.
- Relocation assistance is not provided for this role.
- Only applicants legally eligible to work in Canada should apply. No foreign applicants will be sponsored.
- We look at each resume in detail, so please be sure to review the job description and highlight your experience in relation to this role.
- All candidates will be updated on the status of their application.

To find out more about SeaStar Solutions, please visit our company website at: www.seastarsolutions.com or <http://canada.seastarsolutions.com/careers/>