

JOIN OUR TEAM TODAY!

Job Desc ID: AY.JD.EM.015 2025.06.21

Job Title: Embedded Software Engineer

Location: Remote or Hybrid

Type: Full-Time

Experience Level: Entry to Mid-Level

About AstraYAN:

AstraYAN is an innovative deep-tech start-up focused on pioneering the future design of marine and naval vessels. We specialize in developing advanced engineering solutions and platform systems for smart and unmanned vessels. As a start-up, we value creativity, collaboration, and adaptability. If you are passionate about shaping the future of marine technology, we would love to have you join our team.

The Role:

We are seeking a highly motivated professional to join our team in the role of an Embedded Software Engineer. You will work closely with cross-functional teams to deliver innovative solutions that address both technical and business requirements.

Key Responsibilities:

- Design and develop high performance embedded software in a multi-threaded, distributed system for real time applications.
- Collaborate with hardware engineers to understand hardware capabilities and constraints.
- Hardware/software integration (develop programs that work with hardware to control devices, send/receive data), data acquisition, network communications code.
- Develop and maintain high-performance, maintainable embedded software using C++.
- Optimize and debug software in and control systems and simulators.
- Collaborate with teams across engineering disciplines (mechanical, electrical, electronics, and validation).
- Create technical documentation for software design, implementation, and testing.
- Support testing and validation processes during software qualification phases.

What We're Looking For:

Minimum Qualifications, Requirements:

- Bachelor's or Master's degree in Electrical Engineering, Computer Science, or a related field.
- 3+ years of professional experience in embedded C++ software development.
- Proficiency with communication protocols (OPC UA, CAN bus, Ethernet, serial protocols).
- Experience with version control systems (Git and GitLab etc.).
- Familiarity with real-time operating systems (Linux, VxWorks).
- Strong analytical and troubleshooting skills.

Preferred Qualifications:

- Familiarity with HIL testing for embedded targets and hardware debugging tools.
- Knowledge of MATLAB-Simulink.
- Knowledge of SysML/ UML.
- Knowledge in System Architectural design.
- Experience in networking technologies (OSI network layers, TCP/IP, Ethernet).
- Knowledge of Artificial Intelligence, Machine Learning and Neural Networks.
- Experience with defect tracking tools (Jira etc.) and source control tools (Git etc.).
- Experience with requirements management tools.
- Hands-on experience with electro-mechanical systems and hardware development.

Why Join Us?

- Ownership & Impact: As an early team member, you will have the opportunity to shape the direction of our technology and processes.
- **Growth Opportunities:** Enjoy a fast-paced environment where you can wear multiple hats and develop new skills.
- **Collaborative Culture:** Work alongside passionate, innovative, and creative team members dedicated to transforming the future of marine vessels.
- **Flexibility:** Take advantage of a remote or hybrid work environment with flexible hours. We believe in achieving results, not just clocking hours.
- **Equity:** Enjoy the potential for equity options or stock grants in the company, allowing you to share in the company's success.
- Comprehensive Benefits: Competitive salary, health benefits, and perks to support your well-being.

How to Apply:

Please send your resume to careers@astrayan.com.