JOIN OUR TEAM TODAY!

Job Title: Embedded Systems Intern
Location: Remote
Type: Internship (Full-Time and Part-Time Hybrid)
Duration: 6 months

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 an Embedded Systems Intern to support the development of real-time control software for marine automation and data acquisition systems. This role offers exposure to embedded programming, hardware-software integration, and system-level testing in the context of smart and unmanned vessels.

Key Responsibilities:

- Assist in developing embedded software modules in C/C++ for real-time applications
- Collaborate with hardware engineers to understand board-level integration
- Participate in firmware development and debugging activities
- Learn and apply communication protocols such as CAN, Ethernet, OPC UA
- Contribute to testing and validation of embedded systems using simulators
- Help document software architecture, interfaces, and test procedures

What We're Looking For:

Minimum Qualifications:

- Completed 3rd year B.Tech or 1st year M.Tech in Electronics, Electrical, or Computer Science
- Basic knowledge of embedded systems and microcontroller programming
- Familiarity with C/C++ and scripting tools
- Understanding of real-time operating systems (Linux RTOS, VxWorks preferred)
- Strong problem-solving skills and interest in marine technologies

Preferred Qualifications:

- Experience with communication protocols like CAN bus, OPC UA, or serial
- Exposure to HIL (Hardware-in-the-Loop) or embedded target testing
- Knowledge of Simulink/Stateflow or UML/SysML for system modeling
- Familiarity with Git or version control tools
- Interest in AI/ML applications on embedded platforms

Why Join Us?

- **Real Impact:** Contribute to embedded systems powering future maritime platforms
- **Mentorship:** Learn directly from experienced software and hardware engineers
- **Innovation Culture:** Be part of a startup solving complex integration challenges
- **Remote Flexibility:** Work from home with project-based flexibility
- **Career Growth:** Build a strong base for roles in embedded or marine domains

How to Apply

Send your resume and (optional) project/GitHub portfolio to **careers@astrayan.com** with the subject line: **"Embedded Systems Intern Application"**