JOIN OUR TEAM TODAY!

Job Title: Autonomous 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 looking for a talented and motivated Autonomous Systems Intern to support our development of AI-driven navigation and control systems for unmanned ships. This is a unique opportunity to work on real-time perception, planning, and decision-making algorithms alongside a team of experienced engineers and researchers. You'll gain exposure to cutting-edge marine autonomy, AI, and simulation technologies.

Key Responsibilities:

- Assist in developing and testing AI models for obstacle detection, collision avoidance, and route planning.
- Work with sensor data (e.g., radar, LiDAR, AIS, GPS, cameras) for perception and fusion algorithms.
- Support development of machine learning and reinforcement learning models for control and navigation.
- Use MATLAB/Simulink to simulate control logic and test autonomous behavior.
- Collaborate with other engineers to integrate and validate systems in simulation environments (e.g., Gazebo, ROS).
- Help in documentation, testing, and validation tasks related to ongoing field trials and simulations.

What We're Looking For:
Minimum Qualifications:

- Currently pursuing or recently completed a degree in Computer Science, Robotics, Electrical Engineering, AI, or related field.
- Academic or project experience with machine learning or deep learning (using TensorFlow, PyTorch, or MATLAB).
- Basic understanding of computer vision or sensor fusion.
- Exposure to control systems and simulations, especially using MATLAB/Simulink.
- Familiarity with ROS or ROS 2 and data protocols like DDS is a plus.
- Enthusiastic learner with a strong interest in autonomous systems and marine technologies.
- Ability to work independently and in a remote team setup.

Preferred Qualifications:

- Hands-on experience with simulators (Gazebo, Carla) or robotics projects.
- Knowledge of path planning algorithms (e.g., A*, RRT).
- Familiarity with maritime technologies or prior work with autonomous vehicles (land, air, or sea).
- Basic understanding of real-time systems or embedded platforms.

Why Join Us?

- **Real Impact**: Contribute to live projects in marine autonomy and intelligent systems.
- **Mentorship**: Learn directly from experienced engineers and researchers in a collaborative setting.
- **Innovation Culture**: Work on challenging problems that push the boundaries of current tech.
- **Remote Flexibility**: Work from anywhere with flexible hours.
- **Career Growth**: Opportunity to convert to full-time roles or receive references and mentorship for advanced studies or career opportunities.

How to Apply:
Send your resume and (optional) portfolio/GitHub link to careers@astrayan.com with the subject "Autonomous Systems Intern Application".