



JOIN OUR TEAM TODAY!

Job Desc ID: AY.JD.EM_2025.06.21

Job Title: Autonomous Systems Lead

Location: Remote

Type: Full-Time

Experience Level: Mid-Level to Senior

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 experienced and highly motivated professional to serve as Autonomous Systems Lead with expertise in autonomous systems, computer vision, and machine/ deep learning to lead the development of intelligent autonomous systems for unmanned ships. You will be at the forefront of building real-time perception, planning, and decision-making models that enable vessels to safely operate without human intervention. You will work closely with cross-functional teams to deliver innovative solutions that address both technical and business requirements.

Key Responsibilities:

- Design and develop AI models for real-time obstacle detection, collision avoidance, and route optimization.
- Integrate multi-modal sensor data (radar, LiDAR, AIS, GPS, cameras, machinery data) for environmental perception and situational awareness.
- Develop deep learning and reinforcement learning algorithms for autonomous navigation and control, health monitoring of systems.
- Implement and simulate control logic using MATLAB/Simulink in conjunction with AI systems.
- Collaborate with control engineers, naval architects, and embedded developers to ensure seamless integration.
- Validate models in simulation and field trials, optimizing for real-time performance and safety.

What We're Looking For:**Minimum Qualifications:**

- Bachelor's degree in Computer Science, Robotics, AI, Electrical Engineering, or a related field.
- Proven experience with machine learning and deep learning using TensorFlow, PyTorch, or MATLAB.
- Solid foundation in computer vision, sensor fusion, and perception algorithms.
- Hands-on experience with control systems and simulation in MATLAB/Simulink.
- Knowledge of path planning algorithms (e.g., A*, RRT, MPC) and real-time systems.
- Familiarity with maritime or autonomous vehicle sensor systems and data formats (e.g., NMEA, AIS).
- Familiarity with ROS or ROS 2, and DDS-based communication frameworks.
- Strong problem-solving skills and ability to work cross-functionally in a dynamic team.

Preferred Qualifications:

- Masters/ PhD in AI, Robotics, or related field.
- Experience with ROS, Gazebo, Carla, or similar robotics simulators.
- Prior work in maritime autonomy or navigation systems.
- Understanding of safety-critical software development and regulatory standards in marine systems.
- Experience deploying ML models on embedded hardware or real-time systems.

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.