



ProtectedSeas Marine Monitor (M2) Full Stack Developer Position

Description:

M2 Marine Monitor LLC is a small, focused company building scalable vessel monitoring solutions to support Marine Conservation. Marine Monitor systems combine commercial sensor, power, and communication hardware with custom software and cloud services to track vessels in nearshore coastal waters. M2 sensors and systems include marine radar, GPS, AIS, pan tilt zoom cameras, weather stations, LTE modems, IP controlled power systems, and more. Integration with drones is also under development. Over 20 M2 systems are currently in use around the world.

We are seeking a motivated, full stack developer to help maintain and improve the Marine Monitor stack which include Windows, Python, and AMP (Apache, MySQL, PHP) environments running on PC and cloud infrastructure. Familiarity with managing AWS services is also required. M2 systems are built in the San Francisco Bay area and although most work will be from home, there is a preference for the Bay Area to support building and testing systems. Alternatively, Pensacola Florida is also preferred after the Bay area for co-coding opportunities with the Marine Monitor CTO and lead developer.

Developer will work closely with the Marine Monitor lead developer to maintain the application stack for both the remote managed M2 systems and the central cloud application. The developer will occasionally assist in assembling and testing M2 systems.

Qualifications:

- Required
 - 4 - year degree in Computer Science or equivalent training / experience
 - 2 - 4 years experience in active full stack development and programming
 - Demonstrated proficiency with managing complex, networked applications across multiple environments including network protocols such as TCP/UDP/Serial
 - Experience developing full stack web applications in the LAMP / WAMP environment including
 - HTML Javascript front end coding
 - MySQL Spatial data types and spatial data processing
 - Building RestFUL JSON APIs using PHP
 - Proficient in Python including
 - thread management
 - requests library
 - ONVIF camera library
 - pySerial library
 - Skill with AWS services including

- IAM roles and permissions
 - Lightsail Linux instances
 - RDS including multi-zone and read replicas
 - Simple Storage Service (S3)
 - Simple Email Service
 - Lambda scripting
 - Familiarity with configuring bash scripts on Linux and Windows platforms (SH, BAT) as well as CRON and Scheduled Tasks
 - GitHub version control
 - Basic C# Visual Studio skills
 - Product Engineering experience
 - Basic construction skills to assist with deployments
 - Strong communication skills
 - Ability to work independently
- Desirable
 - AWS Sagemaker or other Machine Learning / AI tools
 - R script
 - Computer vision / Image processing
 - Stochastic estimation / modeling for target tracking
 - Familiarity with Automatic Identification System (AIS) data, GPS, and other NMEA data standards
 - FAA Part 107 Commercial Drone License and / or familiarity with drone operations
 - Experience with U.S. Government IPSEC standards and configurations

Location: Applicants living in the California Bay Area or near Pensacola Florida will be prioritized but the majority of the work will be completed remotely.

Start Date: Immediately

Compensation: Based on experience and employee location. Full Benefits - Health, Dental, Vision, and Life Insurance as well as a 401k with employer match

Travel: This position will require some international and domestic travel (~1 time per quarter)

If interested, please email your resume and a cover letter to M2@protectedseas.net. Please include the subject line "Your Name – Program Coordinator Application" as applicable. Include 3 references including former managers and employers.