

Job Position Available: Senior Software Engineer, Full Stack

Chance Maritime Technologies provides technical solutions for autonomous vessels.

<https://chancemaritime.com/>

Chance Maritime Technologies is looking for qualified candidates for the position of Senior Software Engineer, Full Stack in Lafayette, Louisiana. This role consists of designing and programming USV (Uncrewed Surface Vehicle) software. USVs consist of many mechanical and electrical systems functioning together with highly integrated software to create a reliable solution for a wide array of maritime applications. USVs produce large volumes of data which need to be managed, and often need to be controlled and monitored remotely “Over the Horizon” from an office environment.

As a Software Engineer, Full Stack at Chance Maritime Technologies, you will be responsible for the design and development of software used offboard a USV and any other task as required within your field of expertise. This position will err on the side of the back end of the stack.

This position requires a minimum of 5 years of experience with a B.S. or more advanced degree in Computer Science, Computer Engineering, Mathematics, Physics, or other degree with a concentration in software engineering. Robotics, buoys, UAV/USV/UUV/AUV/UxV, or offshore experience is a plus.

The position may require occasional travel (average of 5%).

Reports to: CTO

Key Responsibilities:

- Collaborative can-do spirit, willing to work with others on challenging problems.
- Hands-on attitude: unafraid of rsyncing data and banging out a python script to process it.
- Design / architect software for USV data handling, monitoring, and control.
- Document software requirements, block diagrams, flow diagrams, and code.
- Develop robust software designed to operate at scale 24/7.
- Test software in sandbox environment and A/B or similar testing in production.
- Debug & troubleshoot your own or your peer’s code.
- Participate in peer reviews & enthusiasm to learn from your peers.
- Communicate and coordinate effectively with team members of all disciplines and management.
- You may also assist with operation and training of USV projects particularly during prototype phases of new designs.

Essential Requirements:

- Experience writing cloud applications that handle mountains of data.
- Experience with containerized software deployment such as Docker.
- Experience with various database systems and their tradeoffs.
- Experience writing software in C++ desired.
- Strong experience with Linux development.
- Experience with modern web frameworks (e.g. Angular, React)
- To have strong oral & written communication, and interpersonal skills.
- To be self-directed, organized, systematic, punctual, and goal oriented.
- Ability to take high level direction from management and lead a small team of engineers.
- This position requires the ability to obtain a TWIC card.

- This position requires use of information which is subject to the International Traffic in Arms Regulations (ITAR). Applicants must be a U.S. Person as per 22 CFR 120.15 in order to satisfy export compliance requirements.

Desirable Skills:

- Enthusiasm for the oceans and everything that floats or sinks in them.
- Experience with big data pipelines for machine learning, in particular for image processing.
- Experience working with hydrographic survey data, or other georeferenced data.
- Basic boat handling skills and competency.
- Experience working in the offshore environment.
- Experience with the Qt framework.
- Experience with Python and numpy.
- Experience in the field of unmanned vehicles and/or robotics, such as:
  - Experience with control systems such as PID controllers.
  - Experience with localization and tracking, e.g. particle filters, kalman filters, SLAM.
  - Experience with deep learning, convolutional neural networks, semantic segmentation.
  - Experience with classical computer vision techniques.
  - Experience with ROS, ROS2, MOOS, UMAA, and/or JAUS.
  - Experience with OpenCV, OpenCL, TensorFlow, or CUDA
  - Strong grasp of linear algebra and bayesian statistics
- Experience with microservice oriented architectures.
- Experience with industrial middleware such as DDS, MQTT, ZMQ, or OPC-UA.

*Chance Maritime Technologies does not discriminate in employment on the basis of race, color, religion, sex (including pregnancy and gender identity), national origin, political affiliation, sexual orientation, marital status, disability, genetic information, age, membership in an employee organization, retaliation, parental status, military service, or other non-merit factor. All employment is decided on the basis of qualifications, merit, and business need.*

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