# **Senior Robotics Software Engineer**



## Full job description

Redzone Robotics delivers high-performance pipeline inspection products and services for municipalities, contractors, and engineering firms across North America. We combine world-class robotic inspection technologies with sophisticated data analytics software to generate truly powerful and useful information that municipalities worldwide require to reduce spending and negative environmental impacts.

RedZone Robotics is seeking a Senior Robotics Software Engineer for an exciting new program in wastewater system assessment. We are looking for a talented engineer who wants to make a significant impact on developing and deploying bleeding-edge assessment technology.

As a Senior Robotics Software Engineer, you will contribute to the design, development, testing, and deployment of our new robotic and sensor systems. This individual will thrive in an environment that requires strong problem-solving skills and independent self-direction, coupled with an aptitude for team collaboration and open communication. They will work closely with the engineering team to efficiently execute design and development strategies and address issues before they reach our valued customers. They will also have experience in a fast-paced and innovative environment where needs and requirements can change rapidly. The ideal candidate will have experience with robotic and advanced sensor systems. This position does require an onsite presence Monday - Friday and will lead a small team of software engineers.

**Duties and Responsibilities include:** 

- Lead design, development, testing, and deployment of robotics software across multiple robotic product lines
- Lead system/architectural design efforts for core robotics software
- Design software interfaces to integrate custom and COTS hardware components
- Adapt and integrate proprietary and open-source software packages and APIs
- Coach entry to mid-level engineers in robotics software development
- Review and functionally test peer software to support team-based agile software practice
- Research and recommend innovative approaches to enhance system performance within a Linux operating system
- Work well in cross-functional teams as well as independently
- Interact and communicate with non-technical users
- Lead a small team of robotic software engineers
- Perform other duties as assigned

## **Skills and Competencies:**

- Experience with developing robotic system software
- Experience developing robotic system software
- Experience with Git version control and with agile software practice
- Working knowledge of ROS
- Experience with requirement gathering and acceptance criteria
- Strong conceptual and visual design skills
- Proficient in C, C++, and Python
- Experience with firmware development and deployment is a plus
- Experience with control and vision-based processing is a plus
- Experience with web services software stack is a plus
- Experience in industrial robotics is a plus
- Strong communication skills (written and verbal), ability to deliver message concisely and effectively



- Strong propensity to listen and ask the right questions of customers and the organization
- Ability to build and maintain interpersonal relationships, and influence at all levels of an organization
- Ability to develop constructive and cooperative working relationships with others and maintaining them over time
- Proactively reach outside the primary area of responsibility to solve conflicts or issues.
- Capability to partner with company's leaders to understand & drive overall cross-functional and business needs.
- Learn quickly, adapt easily to changing technology/circumstances, and apply change management skills appropriately
- The ability to tell when something is wrong or is likely to go wrong
- Analyzing information and evaluating results to choose the best solution and solve problems
- Identifying the underlying principles, reasons, or facts of information by breaking down information or data into separate parts
- Ability to thrive in a cross-functional agile team
- Self-motivated and proactive
- Demonstrated creative and critical thinking capabilities

## **Education and Qualifications:**

- Bachelor's degree with a major in Robotic/Software Engineering or related field of study
- 7+ years in robotics software development
- C, C++, ROS, Python, NVIDIA, Linux, embedded systems

## EQUAL EMPLOYMENT OPPORTUNITY

It is the policy of RedZone Robotics, Inc. to provide equal employment and advancement opportunities to all individuals and to administer its personnel practices based on merit, qualifications, and abilities. RedZone will maintain an environment free of discrimination or harassment on the basis of actual or perceived race, color, national origin, religion, sex, sexual and reproductive health decision-making, age, actual or perceived physical or mental disability, genetic information, marital status, sexual orientation, gender (including gender identity or expression and/or the status of being transgender), military or veteran status, citizenship status, status as a victim of domestic violence, stalking, or sex offense, caregiver status, arrest or conviction record, credit history, unemployment status, or any other unlawful criterion or circumstance. RedZone prohibits and will not tolerate any such discrimination or harassment, or retaliation in response to good faith reports or the provision of information about such discrimination or harassment.

## Job Type: Full-time

## Benefits:

- 401(k)
- 401(k) matching
- Dental insurance
- Employee assistance program
- Flexible schedule
- Health insurance
- Health savings account
- Life insurance
- Paid time off
- Professional development assistance
- Referral program
- Vision insurance

## Schedule:

• 8 hour shift

Work Location: In person

