

FOR IMMEDIATE HIRE: Senior Software Engineer

Company Overview

Construction Robotics is a manufacturer of innovative products for the construction industry. Solutions include lift-assist technology currently targeting the masonry and refractory industries, as well as semi-autonomous robotics for the bricklaying industry. Expansion into additional industries is planned for 2022 and beyond.

Distribution of CR solutions is mainly in the United States; however, the company is poised for growth in North America and overseas based on established relationships.

CR has an experienced board comprising industry leaders as well as the founders of the company. The organization is growing and looking for self-starters that will be creative and efficient while developing sustainable processes that support the growth objectives. This is an exciting time to join a growing organization.

General Information:

- Full-time position based at CR HQ in Victor, NY.
- Reports to the Director of Operations. Will work closely with cross-functional teams. No direct reports.

Job Requirements:

- BS Degree in Computer Science
- Minimum of 7-10 years of experience

Preferred Skills:

- Leading software design efforts
- Windows and Linux application development
- C#/.net/Mono, C++, Java, LabView
- OpenGL, Vulkan, DirectX, etc.
- SQL, PHP, JavaScript, MATLAB, etc.
- Homogenous transformations for 3D graphics
- Experience with Autodesk software
- Excellent problem-solving skills, flexible, resourceful, and independent
- Strong communicator and planner with a positive attitude
- Experience with vision systems
- Experience with interactive GUIs

Overview of responsibilities/expectations

Construction Robotics is seeking a Senior Software Engineer to design and develop a CAD software application for modeling masonry walls. Information from the CAD model will be used to control robotic automation equipment for the construction industry. Construction Robotics is a growing start-up company in a fast paced, exciting phase of development. The ideal candidate is resourceful and goal oriented; a strong individual contributor and works well in a team environment.

Responsibilities include:

- Architect and oversee the development of a CAD software application.
- Develop math routines to manipulate, order, and sort masonry objects in a model.
- Design complex graphical user interfaces to be intuitive and easy to use.
- Develop routines to operate on large sets of data quickly with efficient use of memory.
- Design a 3D graphics environment that can render large numbers of polygons efficiently.
- Provide .net interconnectivity and data sharing with other CAD software applications on the market.
- Architect and oversee the development of a machine performance and data-sharing website.
- Manage ongoing change requests to website appearance and function.
- Develop website integration with 3D CAD models that allows them to be viewed online.
- Work with other team members to learn and develop the overall system control strategy.
- Any other task assigned by management within scope of position, federal, and state regulations.

Submit applications to [hiring@construction-robotics.com](mailto: hiring@construction-robotics.com)

Thank you for your interest in our growth objectives! We look forward to meeting you.