

# Software Firmware Engineer I

**Summary:** Researches, designs, and develops computer software systems in conjunction with hardware product development.

## **Principal Accountabilities:**

1. Design and code software subsystem for automated equipment (Robotic arms, etc.).
2. Work with "Bare Metal" systems that have little or no RTOS.
3. Learn and integrate new hardware, software protocols, and engineering tools.
4. Provide innovation to solve complex system issues.
5. Work with GIT and JIRA to collaborate with team members on project tasks.
6. Program custom circuit boards and integrate additional hardware i.e. sensors, motors, etc.
7. Collaborates with Electrical, Mechanical Engineering and Q&R on product performance requirements, design, test and development activities.

## **Preferred Experience:**

- Experience with Microsoft technology (C, C++, C#).
- Experience with Keil, ARM, TI, VxWorks or other embedded compilers.
- Experience with GIT and Jira.

## **Minimum Requirements:**

- BS Computer Science, BS Electrical Engineering, OR equivalent combination of software development experience and relevant education (ex. AAS and seven (3) years).
- Good verbal and written English communication skills.
- 1+ years experience with C or C++.
- Highly flexible, quality driven, goal oriented and able to participate in a team environment.

## **Responsibility for Quality Procedures or Direct Product Quality:**

Adheres to Universal Quality System policies and procedures and uses Total Cycle Time principles and standard problem solving tools to continuously improve work processes.

## **Physical Demands:**

- While performing the duties of this job, the employee is frequently required to access and manipulate various objects, tools, or controls.
- Requires the ability to use a computer on a frequent basis.
- Position requires the ability to understand and interpret detailed documents and drawings.
- Requires the ability to communicate clearly in giving presentations.
- Must be able to communicate clearly with fellow workers in English.
- The ability to travel to UIC home site (Conklin, NY USA) and customer sites will be required.