



Software Engineer

Job Description:

Rudolph Automation Center of Excellence is responsible for the design and implementation of Automation platforms used across the company. The overarching goal of this group is improving corporate wide operational efficiency by reducing R&D duplication, streamlining manufacturing, and reducing the burden on our field support teams. We are seeking highly skilled software engineers of all experience levels to join a dynamic team building the next generation equipment control software platform that would interface with robotics, staging, and sophisticated mechanical/electrical/optical systems to help drive the development of the world's next generation of smaller, faster semiconductors and consumer electronics in a long-term global growth industry.

The software engineer position is responsible for the full lifecycle of software development, from gathering requirements specifications from internal and external customers, all the way through analysis, design, implementation, unit testing, and support of internal and external customers to maximize the usability of the software to solve their needs. The ideal candidate is both an engineer and a software developer, able to analyze problems to assess root cause, collect and characterize data to gain understanding of system behavior, and understand the physical system which the software is responsible for driving.

Responsibilities:

- Design, document, implement, test and maintain equipment control software for Rudolph Technologies' semiconductor equipment front end modules (EFEM).
- Participate in product requirements definition with peers, customers, management, and marketing.
- Estimate and develop software on schedule and with high internal and external quality.
- Understand and operate complex automation systems integrated to our inspection, metrology, and lithography systems.
- Work with other engineers in cross-functional, cross-geographical development teams.
- Position may include limited travel.

Competency/Experience:

- BS/MS in Computer Science or Software Engineering (Exceptional candidates from other fields will always be considered).
- Excellent object oriented software design and development skills.
- Strongly Desired:
 - Experience with C# and .NET Framework.
 - Experience controlling hardware devices from software.
 - Experience with Non-Realtime Machine Control
 - Experience with rich user-interface development.
 - Experience developing robust multi-threaded applications.
 - Experience with object Serialization, SOAP, WAMP, WCF or other remote communication standards
- Desired:
 - Experience with Smalltalk is a plus.

- Experience with database design and development, preferably MS SQL.
- Semiconductor industry exposure.
- SEMI Factory Automation, SECS/GEM experience.
- Experience working in simulated environments.

Our development culture affords engineers significant technical freedom and responsibility to solve challenging problems with input and guidance from the architecture and management team. At Rudolph, everyone is responsible for quality – all engineers are encouraged to promote new ideas for development methodologies and technologies, and to take ownership in solving issues as they are discovered.

Pay is competitive, with significant opportunity for advancement for exceptional individuals.

Interested individuals are encouraged to include a portfolio of their work if available.