



## **AUTOMATION ENGINEER**

**Department:** Engineering

**Reports To:** Engineer Manager

**Position Summary:** Responsible for designing, building, implementing, testing, maintaining, debugging and repairing computer-controlled systems and robotic devices used in an automated laboratory to reduce human intervention and maximize efficiency.

### **Essential Job Functions:**

Design, build, and install automated instrumentation and equipment, systems, custom hardware add-ons, and related components needed to perform specified laboratory tasks.

Program automation using vendor specific software, custom controls for laboratory instruments, and SQL queries with controls for laboratory information management system database (LIMS) interface.

Perform validations and documentation for quality control; such as Installation Qualification (IQ), Operational Qualification (OQ), and Performance Qualification (PQ) for all automated instrumentation and equipment, systems, custom hardware add-ons, and related components.

Monitor, service, adjust and repair of all automated instrumentation and equipment, systems, custom hardware add-ons, and related components.

Troubleshoot problems and issues occurring with automated instrumentation and equipment, systems, custom hardware add-ons, and related components in order to isolate cause and calibrate, repair, or replace defective parts.

Ensure the performance of routine diagnostic checks and tests and preventative maintenance on all automated instrumentation and equipment, systems, custom hardware add-ons, and related components is completed.

Provide specifications on automated instrumentation and equipment, systems, custom hardware add-ons, and related components for purchase.

Research and remain current on new technologies for system improvements.

Train employees on various automated instrumentation and equipment, systems, custom hardware add-ons, and related components.

EDUCATION:	<p>Bachelor of Science in Engineering, Computer Science, Automation, Sciences or related field.</p> <p>Microsoft SQL certification helpful, but not required.</p>
REQUIRED SKILLS:	<p>Must be proficient in .NET (C#, VB) and SQL programming languages.</p> <p>Experience and demonstrated working knowledge of electrical circuits, and mechanical engineering.</p>
PREFERRED SKILLS:	<p>Experience in Image Processing</p> <p>Experience in IoT Development</p> <p>5 years experience working with laboratory automation equipment such as ABI, Tecan, Beckman, Biotek, Zymark, Liconic, Hamilton, Cognex, Mitsubishi, Thermo, Epson, and Biomicrolab.</p>
ADDITIONAL SKILLS/QUALIFICATIONS:	<p>Must have the ability to react quickly and creatively in order to understand and solve complex problems using strong time management, organizational, prioritization, analytical, problem solving, and troubleshooting skills.</p> <p>Must have excellent written and oral communication skills with experience in creating clear and concise documentation.</p> <p>Must demonstrate a strong work ethic including great personal drive, motivation, discipline, and initiative.</p> <p>Must possess strong interpersonal skills and have the ability to work both independently and cooperatively with all levels of employees, management and third parties.</p>