

**Job Title:** Product Developer/Mechatronics Engineer  
**Department:** Product Development

**Job Summary:**

MANTECH manufactures software-driven automated laboratory and process analytical equipment for water and soil analyses. The successful candidate will work with multiple departments like manufacturing, software development, operations, and QC:

- Design and development of new automated analysis systems soil and water testing.
- Work on complete product development cycle from CAD designing, material/parts selection, vendor selection, prototyping, planning final production model as well as QC procedure.
- Work on integrating hardware to MANTECH software products and apply basic programming knowledge.
- Provide customer support for escalated technical problems.
- Provide technical solution/advice to in-house manufacturing and QC problems.
- Carry out on-site service visits for preventive maintenance or new system installation as need arises.
- Create and maintain documentation such as work instructions, software documentation, hardware manuals etc.

**Education:**

Degree in Mechatronics Engineering or a related field; or significant work experience in similar roles.

**Required Qualifications:**

- 2-3 years of experience working with automation products such as linear actuators, stepper motors, electric grippers, sensors, and vision solutions.
- 2-3 years of experience working with different industrial communication protocols such as Ethernet/IP and MODBUS TCP.
- 2-3 years of experience in SolidWorks with strong CAD skills.
- Experience working with micro controllers, PLCs etc.
- Hands on attitude to build prototype and special automated systems (Cartesian robots, probe holders, racks etc.)
- Strong focus on delivering high quality, organized, and well commented documentation such as work instructions, software documentation and hardware modules.
- Excellent time management and communication skills.
- Possess strong analytical and problem-solving skills with high attention to detail.
- Exceptional ability to work with multidisciplinary teams to solve technical challenges.
- Willingness to travel, ~5%.
- A good sense of humor.
- Ability to work safely in a lab environment with chemicals, automated equipment, and other personnel.

**Desirable Qualifications:**

- Experience with implementation of complex mathematical algorithms into application software
- Development experience in one or more object-oriented language (preferably C#, but a combination of other OOP language + C/C++ experience would be acceptable).
- Basic knowledge of version management (preferably Git).
- Knowledge of basic chemistry and/or lab equipment.

- Experience with SQLite or SQL.
- Experience developing for mechatronic or physical systems.
- Knowledge of common industrial systems (PLCs, 4-20mA, CANbus, *etc.*)
- Experience interfacing with embedded systems (UART, I2C, IP Sockets, *etc.*)
- Experience with electrical troubleshooting.

MANTECH is committed to supporting a culture of diversity and accessibility across the organization. We hire the best talent regardless of race, color, creed, national origin, ancestry, disability, marital status, age, sex, veteran status or sexual orientation.

Interested candidates can send a covering letter and resume to [rmenegotto@mantech-inc.com](mailto:rmenegotto@mantech-inc.com).