

METROPOLITAN WATER DISTRICT OF SALT LAKE & SANDY JOB DESCRIPTION

Position Title: Junior SCADA Programmer

Date: November 20, 2024

FLSA Status: Exempt

Summary Statement of Overall Purpose/Goal of Position:

As a member of the Instrumentation & Electrical (I&E) Department, under the supervision of the Senior SCADA HMI Administrator, the Junior SCADA Programmer will assist in the development, maintenance, and enhancement of the District's Supervisory Control and Data Acquisition (SCADA) systems. This entry-level position is designed for individuals with a keen interest in industrial automation, where the focus is on learning, applying, and growing in SCADA technologies to ensure the effective operation of water management systems.

Essential Duties:

- Participates in training sessions to gain proficiency in SCADA, PLC (Programmable Logic Controller), and HMI (Human-Machine Interface) programming.
- Writes, tests, and documents PLC and HMI code for water treatment and distribution processes.
- Supports in configuring SCADA software interfaces, focusing on data integration and visualization.
- Provides basic troubleshooting assistance to water system operators.
- Under supervision, performs routine maintenance tasks to ensure system reliability.
- Assists in documenting system changes, configurations, and operational procedures.
- Maintains logs of all modifications and updates made to the SCADA systems.
- Works alongside senior staff to understand system architecture and operational needs.
- Collaborates with Operations and Information Technology (IT) departments to understand their needs and gather requirements for the SCADA system. Incorporates feedback to improve and optimize system performance.
- Ensure that all programming and modifications comply with cybersecurity standards.
- Performs all work in a safe and efficient manner, being considerate for personal safety as well as the safety of other employees in the workplace.
- Complies with proper health and safety practices including using the required safety devices and proper PPE.
- Notifies their supervisor immediately of unsafe conditions and acts and reports all accidents to supervisor and/or department manager immediately.

Marginal Duties:

- Attends team meetings to stay informed about current projects and system status.
- Participates in on-call rotations for emergency support, as required by the department.
- Attends various meetings as assigned.

- Performs other related duties as assigned.

Minimum Qualifications:

Education and Experience:

- Graduate from an accredited college or university with an Associate's degree or higher in Electrical Engineering, Computer Science, Information Technology, or related field; or
- Relevant certification in automation or control systems, or
- Equivalent experience in a related field.

Certificates/Licenses:

- Valid Utah Driver's License
- Certification in SCADA, PLC, or related technology is preferred, but not required.

Skills and Abilities:

- Technical Learning: Eager to learn and apply knowledge in SCADA, PLC, and HMI technologies.
- Basic Programming: Fundamental understanding or willingness to learn programming in environments like Ladder Logic, structured text for PLCs, and HMI design software.
- Analytical Skills: Ability to analyze system operations and learn troubleshooting techniques.
- Communication: Good verbal and written communication skills for team collaboration and documentation.
- Detail-Oriented: Precision in following instructions and documenting processes.
- Adaptability: Flexibility to adapt to new technologies and operational requirements.

Physical Demands:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential duties of this job.

While performing the duties of this job, the employee is regularly required to perform repetitive wrist, hand, and/or finger movements.

While performing the duties of this job, the employee is frequently required to: sit, talk, hear, feel attributes of objects, grasp, walk, reach with hands /arms, stoop, kneel, crouch, and crawl.

The employee is occasionally required to: push, stand, drive, climb, and/or balance.

The employee is expected to lift weight or exert force as follows:

Frequently (over 40%): 1 to 30 pounds

Occasionally (less than 40%): 30 to 100 pounds

Specific vision abilities include: Clarity of vision at 20 feet or more and 20 inches or less and three-dimensional vision (ability to judge distance and spatial relationships). Identify and distinguish all colors and adjust the eyes to bring an object into sharp focus. Ability to see up and down or left to right while fixed on a point.

Concentrated attention required during a typical workday in order to accomplish the essential duties of this position.

Working Conditions:

Normally, working conditions are comfortable with light physical activity. Occasional exposure to moderate and loud noise levels. Potential exposure to dust and varying temperatures (non-weather). Occasional exposure to risk of electrical shock, toxic or caustic chemicals, and equipment vibration. Occasional exposure to various outdoor conditions, which may include exposure to weather elements, wet or humid conditions, and work in high or precarious places. Occasional work near moving mechanical parts and in confined spaces. Travel to and from various District sites and training seminars may be required. May be required to be on-call for emergency situations as needed.

Disclaimer:

The above statements are intended to describe the general nature and level of work being performed by person(s) assigned to this job. They are not intended to be an exhaustive list of all duties, responsibilities, and skills required of personnel so classified. The approved class specifications are not intended to and do not infer or create any employment, compensation, or contract rights to any person or persons. This updated job description supersedes prior descriptions for the same position. The District reserves the right to add or change duties at any time.

Prepared by: Souya Shepherd

Date: 11/21/2024

Approved by: Annalee Munsey

Date: November 21, 2024