

Job Description – Application Developer

Date: August 1, 2022

Revision: August 1, 2022

Job Status: Full Time, Exempt

Position Name: **Application Developer**

Reports to: This position reports to the Director of Smart Manufacturing and is functionally assigned to a System Architect.

Supervisory Responsibilities

No direct report supervision responsibilities, however, it is expected that this position will manage work product development assignments and follow-ups with junior resources to meet project and client objectives. It is also expected that this position will train and mentor junior resources.

Job Summary

The Application Developer will work mainly within the Smart Manufacturing group developing and delivering solutions including but not limited to Smart Manufacturing, MES, IIoT, Supply Chain Integration and similar.

Specific solutions include ERP integration, Performance/OEE, Quality, Inventory, Work-in-Process, Traceability, Production Management, Scheduling + Predictive Scheduling, Maintenance + Predictive Maintenance, Control Room, Scoreboards and similar. The Application Developer is expected to contribute to new solutions which are being developed as assigned.

The Application Developer duties will include, but not be limited to the following:

- Learning new technologies and environments through self-guided training and documentation and support from senior team members.
- Develop functional design specifications describing systems and features.
- Develop system architecture including MES, Smart Manufacturing, PACs / PLCs, networks, HMIs, servers, etc.
- Develop MES, Smart Manufacturing PAC / PLC and HMI programs based on functional design specifications and in alignment with programming standards required for each project.
- Deploy systems at client sites and interact with clients at various levels to ensure project success.
- Direct the design efforts for control panel fabrication packages and system installation packages.
- Lead and direct the activities of internal and external project resources to achieve project goals and objectives.

- Ensure work products are technically sound and meet clients' requirements.
- Manage project scope, budget, and schedule to meet commitments made to clients and for profitability.
- Develop relationships with clients while executing project work.
- Hold progress meetings with project teams, clients, and vendors at Polytron's office, client facilities, or vendor facilities.
- Lead and manage field activities during installation and start-up phases at client sites.
- Capable and willing to perform tasks that are required for projects to be successful. These tasks include programming, design, installation, start-up support, as-builts, client follow-up, vendor follow-up, and procurement.
- Develop skill sets and coach internal project resources while executing projects.
- Drive internal processes and system improvements in the operations area.
- Provide support for Service Level Agreement (SLA) work while responding to client's requests for support

Characteristics

The Application Developer must have good personal habits, work well with others, be technically conscientious, be able to stay on task, and complete work on schedule. Must be able to work independently as well as on a team and promote the principles and professionalism of Polytron and its various Alliance Partners.

Quality and Quantity Standards

The expectation of this position is to bill a minimum of 90% of one's time to revenue-producing projects unless temporarily redirected by management.

Education

Bachelor's degree in computer engineering, computer science, electrical engineering or equivalent.

Experience

There are three levels for Application Developer as listed below. Typical years of relevant experience for each are indicated but may vary based on demonstrated proficiency and mastery of the required skills and capabilities.

- Application Developer I – Zero (0) to two (2) years of experience
- Application Developer II – Two (2) to four (4) years of experience.
- Application Developer III – Four (4) to six (6) years of experience.

Well qualified applicants will demonstrate expertise in the following areas of competence:

System Architecture – Understand and apply as appropriate various industry standards such as ISA S95 in architecting and designing hardware and software solutions to meet the client's stated objectives including:

- IT hardware such as servers, monitors, thin clients and similar.
- Software functions including data collection, database, integration, dashboards, reporting, redundancy and similar.

Programming – Must be able to configure, program and develop from scratch, edit, document, test, and troubleshoot the following:

- Automation layer devices such as PLCs, HMI, Instrumentation, RFID/Barcode Readers, Digital/Analog sensors and similar.
- MES and Smart Manufacturing layer solutions using Microsoft (and other) technologies such as .NET (specially C#), SQL Server (or similar databases), and/or Visual Studio.

Hardware – Solid knowledge of devices commonly used in the industrial automation field which include motor/valve control, analog/digital devices, Barcode/Rfid readers, Vision systems, cobots, and similar devices. Must be able to specify hardware to ensure compliance with national and local codes, client specifications, safety regulations, Polytron’s design standards, and quality requirements.

Industrial Networks – Must have solid knowledge of industrial networks. Must be able to configure and troubleshoot common industrial networks.

Procurement – Must be familiar with the procurement process and developing request for proposal packages including scope of work, schedules, specifications, requirements, terms and conditions, and other related documents. Must be familiar with writing purchase orders, as well as overseeing and managing contracts with hardware, software and installation contractors. Must be able to interface with accounting to ensure that project accounting information is correct.

Project Delivery – Must be familiar with and experienced in project delivery methodology. Must be capable of leading or performing any or all phases of the project delivery methodology. The phases of the project delivery methodology include Feasibility, Conceptual, Definition, Design, Installation, and CQV.

Computer and Software Skills

Must be computer literate and experienced in using the following tools: Microsoft Office Suite (Word, Excel, PowerPoint, Visio). Proficient in the Windows environment and use of the Internet E-mail.

Other Skills

Must be organized.

Must have good written and oral communication skills.

Must manage multiple projects with minimal supervision.

Physical Requirements

The Application Developer position is considered to be generally sedentary for tasks in the office, although standing for prolonged periods may be required. Tasks required to be performed at client sites may require walking, climbing stairs and ladders, and ducking under equipment/structures.

Working conditions

Working conditions will vary from an office environment to a manufacturing plant environment. This position will require one to work at Polytron’s offices and clients’ facilities. While working at clients’ facilities, adhering to their health, safety, and security policies is an essential requirement of the job. Background, as well as random and targeted drug screening may be required.

Travel

Travel is expected for this position and is essential for success. Travel will average at least 30%.

Work Authorization

All positions require proof of United States citizenship or authorization to work in the United States.

Working Remotely

Telecommuting may be considered in special circumstances and is subject to management approval.

Unplanned activities

This position requires flexibility and adaptability. There will be tasks assigned that are outside of this job description from time to time.

Please note that this job description is not designed to be an exhaustive listing of all the activities, duties, or responsibilities that are required for employment. Activities, duties, and responsibilities may change at any time and without notice.

Polytron is an equal opportunity employer that prohibits any form of unlawful employee harassment and does not discriminate based on race, color, religion, gender, sexual orientation, gender identity, gender presentation, national origin, age, disability (physical or mental), genetic information, marital status, or military or veteran status in accordance with applicable federal, state, and local laws. This policy applies to all terms and conditions of employment, including, but not limited to, hiring, placement, promotion, termination, layoff, recall, transfer, leaves of absence, compensation, and training.