

Bibin Varkey

DCS AUTOMATION ENGINEER

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Summary

Industrial Automation Engineer offering over 2 years of experience in Terminal Automation System, DCS Projects Engineering, PLC & SCADA Engineering & Industrial Networking.

Pro-active, Extrovert & Quick-Learner with a strong interpersonal and organization skills with the ability to complete work accurately with attention to detail.

Adaptable to any working environment with people of various demography and willing to develop multitasking skills, capacity to perform in deadline-driven environment with great attitude to contribute the accomplishments of the company's goals as well as to broaden my horizons.

Seeking a Position of Project Engineer which will enable me to learn, create, innovate and simultaneously help my individual growth which will further contribute to the goals of the organization effectively using technological & managerial skills.

Core Competencies

- DeltaV DCS
- Visual C#, Visual Basic
- MS SQL
- WireShark
- IPv4 Industrial Communication Protocol Networking
- Documentation & Validation Engineering
- Rosemount Tankmaster
- SCADA Development on WinCC OA, Intellution iFix, iVisionMax
- PLC Programming on Step 7, Rslogix, GE Proficy Machine Edition, Unity Pro XL
- HMI Programming on WinCC, FactoryTalk View, RSLogix.
- Safety DCS DeltaV Development
- Safety PLC Programming on ToolBox ST
- VFD Programming.
- GCU & MFR Programming
- CCTC Integration

Professional Experience & Background

DCS Project Engineer April 2017 - Present

Technix ACS Pvt Ltd (System Integrator of Emerson Automation Solutions)

HPCL 3 TAS (Terminal Automation System Project)

HMEL BHATINDA (Terminal Automation System Project)

EISAI PHARMA LTD (Batch Process Automation System)

SRF INDIA LTD (Continuous Process Automation System)

DEEPAK FERTILIZER LTD (Continuous Process Automation System)

GRANULES INDIA LTD (Semi-Batch Process Automation System)

Nature of Job Involved with DCS

- Preparing an I/O assignment based on inputs from Customers (I/O List, JB Schedule)
- Generating TQ's and resolving it with customer.
- Preparing Hardware, Software & Graphics FDS, Creating FAT Protocol, System Risk Assessment, Technical Specification for Buyout & Procurement.
- Generated Internal Qualification, Performance Qualification, Operational Qualification Document.
- Documentation of FAT, QA/QC Documentation.
- Preparing Workflow Diagrams, Proof of Concept & Flowcharts for Software Development.
- Conducted Hardware & Software Factory Acceptance Test & Site Acceptance Test.
- Selection of Class Based Control Modules & Development of Customized Control Modules

Community Involvement

- Organized Blood Donation Campaign at Church & Colleges**
- Organized Bible Vacation School Camp at Church**
- Volunteer** – St. Gregorious Syrian Church, Alard Group of Colleges.

Extra-curricular Activities

- Trekking, Camping, Swimming, Football, Gymming, Cricket.**
- Reading Quora & Books.**

Technological Proficiencies

- DeltaV DCS
- WinCC OA
- Rosemount Tankmaster
- Honeywell Batch Controller 1010CB
- Industrial Networking

Languages

- English (Proficient)
- Hindi (Proficient)
- Marathi (Proficient)
- French (Beginner)
- Malayalam (Intermediate)

Additional Certification Courses

- PG DIPLOMA IN INDUSTRIAL AUTOMATION SYSTEM (L&T CONTROL & AUTOMATION)**
- CERTIFIED AUTOMATION ENGINEER (TAACT, THANE)**

(Classless)

- Programming & Testing of DCS Using Control Modules for Interlocks, Sequential Functional Charts, Programming Logic Modules, Equipment Modules.
- Development & Testing of Graphics as per FDS & P&ID's.
- Integrated Testing of Graphics & Logic, Customizing Dyamos & Creating Dynamo Library
- Programming & Testing of Customized User Interface using Visual Basic in VB6 IDE for Tank Sequencing, Pump Sequencing & Pipeline Custody Transfer.
- Development & Testing of Stored Procedures, Functions & Tables for User Friendly Events, Crystal Reports, ROLTA's & User Privilege Functionality using MS SQL
- Trouble shooting of DCS hardware equipment's
- Designing of DCS System & Marshalling Cabinets.
- Hot & Cold Loop checks i.e Internal & External Cabinets of DCS System.
- Panel Pre-PowerUp Checks, Erection & Commissioning of DeltaV DCS.
- Installation, Development & Testing of Sytech Reporting Tool for Batch Production Report
- Proficient with Industrial Communication Protocols such as Modbus RTU, RS-485, RS-232, TCP/IP, Profibus, Fieldbus, HART, OPC for Third Party Communication.
- Integration with Pipeline SCADA & TAS SCADA.
- Simulation & Testing of SCADA with ERP-INTERFACE (JDE), Card Reader, Batch Controller & Multifunctional Flow Meter Communication with MOXA Terminal Server along with Driver Configuration Testing of the same.
- Creating Domain Controller & Additional Domain Controller and adding other Workstation as Domain Members.
- Configuring Limit Login Access Tool.

Additional Skill Improvement Course

- *Project Management*
- *Cost & Contract Management*
- *Risk Management*
- *Labour & Resource Management*
- *Wireless Networking & Analysis*

Automation Project Engineer

June 2016 - Dec 2016

Larsen & Toubro Ltd (Control & Automation)

PROJECT: INDIAN OIL MARKETING TERMINAL, RAJBANDH (SMART TERMINAL AUTOMATION SYSTEM)

- Simulation & Testing of SCADA with ERP-INTERFACE (SAP), Card Reader, Batch Controller & Multifunctional Flow Meter Communication with MOXA Terminal Server along with Driver Configuration Testing of the same.
- Design, Development & Commissioning Of SCADA (iVisionmax) for Terminal Automation System for the following functions:-
- a) Loading Operation through Load Sequence & Driver Communication with Batch Controller.
- b) Auto-FAN, Auto-Invoicing, Auto-Truck Entry Attendance System, Auto-Dip & Density Posting, Process Automation System, Safety Monitoring System, 15 Line Bay Que Display & Auto Announcement System
- Programming & Commissioning of Tank Farm Management System using Emerson Rosemount Tank
- Programming & Testing of Process Automation through GE Process PLC (Rx3i) using Proficy Machine Edition v8.5 and communication of the same with SCADA.
- Programming & Testing of Safety Monitoring, ESD & Shutdown through GE Mark VLEs Controller using ToolBox ST and Interface of the same with SCADA, Process PLC & Pipeline PLC through Ethernet Gateway Controller.
- Testing of Crystal Reports
- Workstation Configuration & Industrial Networking.
- Preparing an I/O assignment, I/O List, JB Schedule, Instrument List, Termination Details based on inputs from Customers.
- Generating TQ's and resolving it with customer.
- Site Acceptance Test Documentation, Quality Acceptance Plan, Test Certification & Drawing Approvals.
- Preparing Workflow Diagrams, Proof of Concept & Flowcharts for Software Development.
- Conducted Hardware & Software Factory Acceptance Test & Site Acceptance Test.
- Development & Testing of Graphics as per FDS & P&ID's.
- Integrated Testing of Graphics & Logic, Customizing Dyamos, Faceplates & Creating Dynamo Library
- Programming & Testing of Customized User Interface using Visual C# in Visual Studio (WinCC OA) IDE for Tank Sequencing, Pump Sequencing & Pipeline Custody Transfer, Bay Loading.
- Trouble shooting of PLC, Batch Controller, Card Reader, Gateway & Other Networking hardware equipment's
- Hot & Cold Loop checks i.e Internal & External Cabinets of PLC System.
- Panel Pre-PowerUp Checks, Erection & Commissioning of PLC & Networking Cabinet.

- Proficient with Industrial Communication Protocols such as Modbus RTU, RS-485, RS-232, TCP/IP, Fieldbus, HART, OPC for Third Party Communication.
- Integration with Pipeline SCADA & TAS SCADA.
- Preparing Specifications for Bill Of Materials, Minutes Of Meeting , Check List, Compliance & Test Reports
- Commissioning & Programming Of CCTV System with VA Analytics(HONEYWELL), Fire Alarm System(MORLEY IAS HONEYWELL), Access Control Systems(HID BIO-CLASS).
- Preparing Cable Schedule, Foundation Plan, Cable Sizing, Laying, Termination & Tagging Details for Project Work.

Automation Project Engineer

Jan 2017 - March 2017

Powerica Ltd, Silvassa

PROJECT: M/s USV LIMITED, DAMAN (1*1250+1*1500+1*1500 KVA DG SET)
 PROJECT: BHEL ELECTRICAL MACHINES LIMITED, DELHI (2*750+2*200 KVA DG SET)
 PROJECT: BHARAT PETROLEUM CORPORATION LTD (3.4MW DG SET)
 PROJECT: GSPC LNG LIMITED, KOCHI [2*3MW DG SET]
 PROJECT: BIOCON LIMITED SEZ DEVELOPER, BANGALORE [3*2000 KVA DG SET]
 PROJECT: FIRST CONTINENTAL PROP. LTD., J.N.P.T, NHAVA SHEVA [7*1250 DG SET]

- PLC Programming of Step 7 for S7-300, 400, 1200(Siemens), RsLogix 500 for Micrologic 1400, Unity Pro XL for Modicon Premium TSX for DG Automation
- Preparing I/O List as per Customer Inputs.
- HMI Screen Development in WinCC for Siemens HMI, RsView & Factory Talk for Allen Bradley & Vijeo Designer for Schneider HMI.
- Electrical Configuration, Installation & Commissioning Of Programming, Electrical Configuration & Communication Of Generator Control Unit (CUMMINS PCC 3.3,3.2,3.1,2.1,1.2,1.3, DEESEA 7450,WOODWARD EASYGEN 2000, DIEF AGC 242,246) for Engine & Alternator Control (Auto-Mains Failure, Auto Load Sharing, Auto-Synchronization)
- Programming, Electrical Configuration & Communication Of MULTIFUNCTION RELAY (L&T, SYNMAP BC, BCG, ALSTOM MICOM P111) for ANSI Electrical Protection Functions Configuration.
- Panel Design, Manufacturing, Testing & Engineering of PCC, MCC, MRP, APFC & PLC PANELS, Computing mathematical & Statistical Load Calculations for Feeder Design.
- Performing Testing & Troubleshooting for 7.5kVA-3000kVA Gensets. Preparing Cable Schedule, Foundation Plan, Cable Sizing, Laying, Termination & Tagging Details for Project Work.
- Evaluation of the Load List for Feeder Design in DOL, S/D, VFD, PDB, MRP, PLC PANEL Preparation of I/O List, Instrument Loop Diagrams, Instrument Hookup Diagrams
- Selection of Field Measurement Instruments, MOV Valve, Metering & Protection CTs & PTs, ANSI Protection Relays & Preparing Datasheet for the same.
- Selection of Appropriate switchgears (ACB, MCCB, MCB, MPCB, Control Fuses, Contactors, OLRs), control cable sizes, VFD Rating & PLC. Design of Control Cable Routing in MCC Feeders, Termination Details, Cable Sizing For Field & Panel, Bus Bar Sizing.
- Preparing Specifications for Bill Of Materials, Minutes Of Meeting , Check List, Compliance & Test Reports Reviewing Of Suppliers Quotation, Preparing Letter of Intent & Dispatch Material Details, Reporting & Documentation for FAT, QAP & SAT.
- Programming, Electrical Configuration Of Combined Timer & Counter, PID Controllers, APFC Controllers (SELEC CONTROLS), Multifunction Meters(SELEC, SCHNEIDER CONZERV SERIES with RS-485 Communication with MIICRO-LOGIX 5000 PLC),Temperature Scanner with RS-485 (MASIBUS)

Trainee Automation Engineer

Nov 2014 - July 2015

Sony Electrical & Automation Pvt Ltd (System Integrator for DPM Instruments Pvt Ltd)

- Selection of Appropriate switchgears (ACB, MCCB, MCB, MPCB, Control Fuses, Contactors, OLRs), control cable sizes, VFD Rating & PLC. Design of Control Cable Routing in MCC Feeders, Termination Details, Cable Sizing For Field & Panel, Bus Bar Sizing.
- Preparing Specifications for Bill Of Materials, Minutes Of Meeting , Check List, Compliance & Test Reports
- Reviewing Of Suppliers Quotation, Preparing Letter of Intent & Dispatch Material Details, Reporting & Documentation for FAT, QAP & SAT.

- Preparing Panel & Site Procurement Details, Panel Building Supervision.
- Preparing Cable Schedule, Foundation Plan, Cable Sizing, Laying, Termination & Tagging Details for Project Work.
- Evaluation of the Load List for Feeder Design in DOL, S/D, VFD, PDB, MRP, PLC PANEL Preparation of I/O List, Instrument Loop Diagrams, Instrument Hookup Diagrams
- Preparing I/O List as per Customer Inputs.
- VFD Programming, Electrical Configuration with Analog Control for Delta (7.5 Hp), Danfoss (15, 20 hp), Siemens (7.5 Hp) For Dosing in Agitators.
- Panel Design, Manufacturing, Testing & Engineering of PCC, MCC, MRP, APFC & PLC PANELS, Computing mathematical & Statistical Load Calculations for Feeder Design.
- Programming, Electrical Configuration Of Combined Controllers, APFC Controllers (SELEC CONTROLS), Multifunction Meters(SELEC, SCHNEIDER CONZERV SERIES with RS-485 Communication with MIICRO-LOGIX 5000 PLC), Temperature Scanner with RS-485 (MASIBUS)

Education

BACHELORS IN ENGINEERING (ELECTRONICS & TELECOMMUNICATION) 2009 - 2016

UNIVERSITY OF PUNE

ALARD COLLEGE OF ENGINEERING & MANAGEMENT, PUNE

HIGHER SECOND CLASS (58%)

HIGHER SECONDARY HIGH SCHOOL CERTIFICATE 2007 - 2009

St.Mary's Junior College, Vashi (Science) (MSBSHSE)

HIGHER FIRST CLASS (68%)- (12TH SCIENCE)

SECONDARY HIGH SCHOOL CERTIFICATE 1994 - 2007

St.Theresa Convent High School

DISTINCTION (76%) - (10TH)