



SHASWAT

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Member ID
6515021



Summary

- ⇒ Accomplished Project Manager & Program Leader with 15 years of cross functional experience, equipped in Digital Product Management, development & delivery management, program strategy, governance & road mapping across domain like Industry 4.0 Solutions, Software Engineering, IT, Digital Transformation, Engineering and Manufacturing, with leading MNCs.
- ⇒ Delivered multi-million value products & solutions in IT & OT space with domain ranging from Industrial Controls, Manufacturing Execution System (MES), Digitalization with Advanced Analytics , IIOT, Digital Twin, and Custom built IT solutions, working hand in hand with Senior management, CXO's & customers.

Industry

OIL & GAS: Turbines, Compressor, Warehouse Automation, Refrigeration/Chiller Unit, Burner Management System, Plant Automation, AHU, HVAC

Manufacturing/Commissioning: EO/EG , Gas Cracker Unit, PVC/VCM, Robotics Ware House Bagging

Life sciences: Bioreactors, Cell retention System, Smart Mixer, iVI, FTP (**IIOT Projects 4.0**)

Core Competencies

Project & Program Management	Project Management Lifecycle (Agile & Waterfall), P&L and Financial Management, Risk & Change Management, Stakeholder engagement, Resource & Vendor Management, Scrum, Kanban & Scaled-Agile Implementation, Program Strategy, Benefit analysis, DevOps & CI/CD pipelining, SDLC
Product Management	Ideation & Product Road mapping, Feature Analysis & Concept Testing, Feature Prioritization & Estimation, A/B testing, Agile Development, PM Framework
Business Analytics	Data Analytics, Business Intelligence & Visualization, Benefit Analysis & Benchmarking, Dynamic Dashboarding & Reporting
Data Engineering	Data Architecture, Integration, Data Science & Statistical Methods for Predictive Analytics Lifecycle, Data preparation, EDA and Feature Engineering.
System Design/Engineering	Industry 4.0 solutions, IOT/IIOT, Manufacturing Execution System (MES) Solutions, Digital Twin, System & Solution Architecture based on .Net / Java/Spring Boot / Python, Node.js/ React.Js in integration with Automation & Control Systems Design for DCS/PLC/Turbine Controls/ESD/F&G having security enabled based on ISA 95/IEC 62443
Strategy & Vision	Introduction of OOPS in PLC Programming, Version control using GIT for PLC, EMF modelling framework to integrate IT & OT, Utilizing Simulink Model for Unified code for different PLC.
Quality Management	Value Stream Mapping, Lean, Kaizen, Six Sigma & Process Improvement

Computer Skills

Operating Systems	Windows 98/2000/XP/Win7/Win10/Win11, LINUX & MacOS
Software Packages	Microsoft Office, MS Project, Oracle, Visual Studio .Net, JAVA, HTML/CSS, C++, Node.js, Python, Django
Scripts	Visual Basic, VBA, PowerShell
Application	SAP (PM & MM module), Primavera, Teamcenter, Confluence, Jira, Microsoft Project
Database	My SQL, MS Sql, Postgre Sql, MongoDB, Influx
Simulation & Modelling	MATLAB & Simulink, LabView, Hysys, In-Controller
Virtualization	Hyper-V & VM Ware , Docker ,Container
MQTT, AMQP	Rabbit MQ, Adafruit, Blynk, Node Red
Embedded IoT platform	Arduino, Raspberry Pi, ESP 8266, Node MCU, ESP-32
Version Control	GitHub, Bitbucket
Analytics & Cloud	Power BI ,AWS (S3,EC2,IOT)

PLC

Codesys, Wago, Siemens S7 , S5, PCS7
Rockwell: Rslogix5, SLC 500, Studio 5000,
Schneider, Omron & G.E Fanuc(PME)

ESD & TURBINE PLC

GE Mark VI-e/VI-eS/ Mark-VI/Mark-V
Triconex, ABB August, HIMA, Detronics
CCC: Series 3++, Series4 , Series 5 & Prodigy

SCADA & HMI

Cimplicity, iFIX
Wonderware System Platform OMI & Intouch
Citect, RS-View & WinCC

DCS & Machine Monitoring

Honeywell TDC3000
Emerson DVOP & Delta V
Yokogawa Centum CS, Bentley Nevada
3300/3500

FDT/DTM/Protocols

MTL DTM , P&F PACTware
ValVue3, Emerson AMS, SMTP, HTTPs, CAN,
OPC DA/UA/A&E, MTP, Ethernet /IP, Profinet,
Modbus, Profibus, DNP, HART, I2C, EGD,
Foundation Fieldbus

Instrumentation & Design

Commissioning, Procurement, Maintenance, Loop
Diagram, Cable scheduling, Hookup Drawing, Control
& Electrical Schematic, Instruments Data sheet,
Communication Data, P&ID & SAMA, HAZOP, SIS &
SIL, Antisurge, Master & Load Control, ISA standards

PROFESSIONAL EXPERIENCE

PRESENT EXPERIENCE:

Currently Working at Merck life Science as Systems Architect/TPM in S&A R&D for Merck IOT/IOT Industry 4.0 NPI Products from OCT 2020

- ⇒ Working in AGILE methodology from Project Initiation to Project Closure by managing multiple large, complex technology initiatives based on Industry4.0 Digital Product portfolio, significant improvements by working with **Multiple Cross Art Scrum Teams** for all development of Products in line with 21CFRPart 11, cGMP, GAMP & ISA standards (s88, s95, s18.2, s51, s5.1)
- ⇒ Liaison between Product Management, Marketing, Business Team & Customer to collect requirements and incorporating in projects using **JIRA, Confluence** as Program Outline, Features, Technical specification to make it available for Scrum team
- ⇒ Designing the IT(**JAVA, .Net, React**) and OT (**PLC, Python & SCADA**) architecture i.e. Network, Platform, Hardware & Application(Trends, Analytics, Reporting, User Management), CI/CD (**Jenkins**) for the product based on microservices in line with **ISA99, ISA100, ISA101, IEC62443, ISA95**
- ⇒ **Design & Developed the WEB Based HMI for the industrial product**
- ⇒ Handling multiple projects which requires partnering with technical managers to secure resources, doing design reviews, scope engineering efforts, set project priorities, milestones, and drive delivery.

- ⇒ Planning task, defining timeline for program and preparing risk Matrix iteration wise.
- ⇒ Product Structuring ,Preparing BOM for the procurement of the equipment's required for the project and help team in building the prototype and final product.
- ⇒ **Automated Jira and Bitbucket for creating status reports and task matrix for each project using .Net and Python**

IoT Projects (DIY)

- ⇒ Designed and Developed hardware simulation using Raspberry pi which allowed to use single set of hardware to be connected with multiple PLC without manual intervention
- ⇒ Home Automation using Arduino / ESP8266 & Raspberry pi using IFTTT, Blynk and Adafruit IO compatible with Alexa and Google assistant
- ⇒ Design and Developed IoT switch board, household gas burner control, Smart Water irrigation system using ESP8266 and NodeMCU
- ⇒ Design and Developed IoT based industrial controller to control Smart Mixer remotely using Raspberry pi and Wago PLC.

Worked at UST Global from March 2019 to October 2020 on IIOT project for Pharma division at Merck.

Worked at Compressor Control Corporation(CCC) from August 2018 to March 2019 in GCC region.

- ⇒ iFat for Antisurge, Load Sharing, Master Controller for ENOC Project Vanguard Control System
- ⇒ Pre Commissioning/Commissioning Activity for GASCO Habshaan unit in Vanguard Control System and Yokogawa DCS for Antisurge/Master Controller/Load Sharing
- ⇒ Adept in doing all the Calculation for Flow Measuring Device(FMD), and Designing and Calculating Surge Limit Line(SLL) from Compressor Map and Plotting actual surge line during Compressor Surge test.
- ⇒ Developed Application in C#.Net to Calculate FMD,SLL,SCL, different Configuration parameter for different CCC controllers in Offline and Online mode.
- ⇒ Developed OPC Client Application to do automatic testing of Software and also do Data synthesis.
- ⇒ Pre Commissioning/Commissioning & Surge Test of Mac Bac Siemens Compressor & Syngas Compressor at Reliance Jamnagar.

Worked at G.E Energy OIL & GAS,Flow & Process Technology & Vetco Gray Subsea Control from June 2011 to July 2018

Project Management Specialist -Engineering GE

June 2016-July 2018

Software Lifecycle Platform(SLP) (.Net , Java Script & MongoDB ,No SQL)

SLP is software platform which automates the Process of Project assignment to Software development & live update of each Project status at each step

SLP leads to the automation 60% of total steps required to complete the software development of Control System design project.

Managed the Team of Development of Software Lifecycle Platform

- ⇒ Worked as TPM from project Initiation to Closure of Software Lifecycle Platform.
- ⇒ Finalizing the Vendor based on Technical & Financial aspect & Analyzing the Techno Commercial Proposal Provided by the Vendor and amending as per requirement of company
- ⇒ Coordinating between Leadership, Engineering and Vendor in order to make requirement clear and smooth execution of project
- ⇒ Carrying out review of sprint provided by vendor and Making required changes in Project Sprint as per Requirement
- ⇒ Leading the Designing, Architecture & Infrastructure requirement for the Software & Reviewing the software and coding Practice ,Aligning the Process map of three different Engineering teams in order to Automate Process
- ⇒ Maintaining Reports for Project status, MOM and Resource assignment.

Achievements

- ⇒ During Finalization of Techno Commercial Proposal saved an amount of 30lakh by utilizing tools developed in-house by coordinating with different teams
- ⇒ After Completion of SLP expecting a smooth and Singular behavior of Project Execution in Team and also It will reduce manual effort by 250hrs per Project i.e. a Saving of 17500 euro per Project

SVI NEXGEN Control Valve NPI (.Net & Labview)

Build a Team in India, Managing Vendor and Developing an Application for all Vendor for electronics testing

- ⇒ Worked on SVI NexGen Control Valve NPI project in Randolph, MA, USA
- ⇒ Gathering business requirement from product management team and all stake holders preparing technical specification for Embedded electronics board required for Control valve positioner.
- ⇒ Heading all the requirement from vendor in India for the testing of electronics board and maintaining use cases based and alignment with business requirement.
- ⇒ Developed Manufacturing Testing Environment in LabView and .Net Application for Vendors to test different electronics boards of Valve Positioner using HART and I2C protocol for communication, Downloading Firmware, Gathering different parameters from electronics board.
- ⇒ Performed code reviews for HART protocol and valve DTM product and developed HART Communication DTM in C#.Net
- ⇒ Test different operation of Electronics board for Control Valve Diagnostics Application and work in parallel with firmware development team to automate firmware tests.

Technical Leader & Control System Design Engineer – May 2011-June2016

Gas Turbine/Steam Turbine/Electro Motor Compressor/TurboExpander

- Design, Integrate & implemented end to end solution for Control & Instrumentation system for Gas-turbine, plant automation, compressor & generator control systems
- Led the Basic & Detail engineering designs & gate reviews including KOM, HAZOP, SIL analysis, FMEA, Software Validation, and Finalization meeting
- Conceptualizing engineering including System Architecture, Control & Power scheme, cabling & wiring layout ,3rd party-system Integration, Functional design -Logic Diagrams & Trip Matrix
- Commissioning of Turbines/Moto Compressor at different sites
- Software Development of Gas Turbine/Steam Turbine/Compressor/Turboexpander

PLC Automation Software in .Net Platform (gecssautomation.api & xml in c# & vb.Net)

- ⇒ Developed a Automation Software for PLC& SCADA which Automatically Create Logic, Signals, HMI Screens and also Convert Logic from one platform to another & Automated Cross functional PLC Logic Validation & Testing
- ⇒ Automated Revision Control for IO Assignment ,HMI Screens Tag Configuration Using SQL Server
- ⇒ Automatic Configuration & Testing of HMI (IO Loop Test)
- ⇒ Automated Process to Test and Correct PLC Software & HMI according to Input Document.
- ⇒ Automatic PLC Code Development from Input Document ,Hardware Assignment & Configuration for different PLC Platform(MKvie, GE Fanuc, Allen Bradley, Triconex)
- ⇒ Automatic Creation of Communication Document

Developed **WEB HMI** to show all the data in web based application hosted in **Predix which can be accessed from anywhere over web (Java, JSP , My SQL, .Net OPC Client and direct connect with MK-VIe PLC using gecssautomation API to get live data)**

MATLAB & SIMULINK & NI LABVIEW

- ⇒ Development of Simulation and Logic Block in Simulink Environment
- ⇒ Conversion of Simulink Code for Different PLC Environment
- ⇒ Simulating PLC logic using Simulink Model using OPC communication.
- ⇒ HMI and Logic Development for Testing In LabView & ADR Setup
- ⇒ Develop logic and GUI in LabView.
- ⇒ Using .Net API and DLL in LabView environment.
- ⇒ Communicating PLC with LabView over OPC and Modbus communication protocol
- ⇒ Arduino communication, Logic development and operation using LabView.

ProjectsWorked: APLNG(Australia),MALVINAS(Peru),ZADCO(ZadcoIsland), PTT(Thailand),CHAMBAL(India),EEP(Egypt),LIBRA,RAMAGUNDAM(India),OURHOUD(Algeria),VCNG(Russia),QASSIM(SaudiArabia),EMAL(Dubai),NASAR(SaudiArabia),WASBENGOA(Saudi Arabia)

**September '07 till 20th May 2011 worked in Reliance Industries Limited as Manager
PROJECTS & COMMISSIONING**

- Led Plant Erection & Commissioning & managing inventory including resource and manpower handling
- Oversaw plant operation, maintenance across refinery including Shutdown planning & support

ACADEMIC CREDENTIALS

2007 - **B.E. (Instrumentation & Control)** R.K.D.F Institute of Science and Technology, BHOPAL
Percentage Marks-79.1% (Honor's Degree)

PROFESSIONAL ACHIEVEMENTS

- ⇒ Awarded "**Excellent Performer Of The Year-2009**" in the FOPE training program at **RIL-DMD**
- ⇒ Awarded "**Exemplary Award**" for the Modification of Robotics in PVC Bagging area in 2009 at RIL
- ⇒ Awarded "**Exemplary Award**" for the Real Time Dryer Logic Implementation at PVC **Delta V DCS**
- ⇒ Awarded for "**Customer value Excellence**" for PTT Saiyok Thailand for **bringing 12 New projects**
- ⇒ Awarded for "**Customer value Excellence**" for Malvinas Peru **Shortest cycle project delivery**
- ⇒ Awarded for "**Productivity of the Year**" for SLP and Automation Platform for PLC and HMI
- ⇒ Foundation of Leadership Training Certificate from GE
- ⇒ **Six Sigma Green Belt** Certified
- ⇒ Safe 5 Practitioner Certified
- ⇒ Got Distinguished Award in Quality Circle presentation at State level in Gujarat 2009
- ⇒ Got Distinguished Award in Quality Circle presentation at National level Bangalore chapter 2009
- ⇒ Letter of Appreciation from **APLNG** Customer.
- ⇒ Swagelock Certified training for fittings
- ⇒ Bentley Nevada Certification for MCMS
- ⇒ **12 Kaizen** Award for Automation Tools in .Net for PLC

EXTRA CURRICULAR ACTIVITIES

- ⇒ Winner in Instrumental competition at inter college level
- ⇒ Won first prize in ad-mag contest
- ⇒ Won second prize in Instrumental competition at state level.
- ⇒ Winner in Badminton championship at District level.
- ⇒ Done senior diploma in MUSIC from Prayag University
- ⇒ Participated in National level Mathematics Olympiad

HOBBIES

- ⇒ Playing different Musical instruments,
- ⇒ Playing Badminton
- ⇒ Making Friends.

PERSONAL DETAILS

Date of Birth	12 TH JULY 1986
Sex	Male
Nationality	Indian
Languages	Hindi, English
Personal Traits	Punctual, Hardworking, Innovative
Marital Status	Married
Permanent Address	C/O Dr. Raj kumar Prasad , New Colony Kali Bari , GAYA , BIHAR ,823001

Date:

(Shaswat)