AMOL NAMDEV JARAG

PROJECT MANAGER

+91 9322532621 amoljarag@gmail.com

A strategic and visionary professional pursuing senior-level positions in project management with an esteemed organization.

PROFILE SUMMARY

- A performance-driven professional showcasing **16 years** of comprehensive experience in **IOT, Automotive, HVAC, Locomotive and Safety Critical Embedded Software Design & Development** for **USA, Europe clients**, coupled with adept people management and team leadership skills.
- Currently working as **Project Manager** with **Siemens, Pune.**
- Proficient in leading IOT, Automotive, HVAC, and Safety Critical Embedded Software Design & Development, with expertise in project management, proposal preparation, requirement analysis, software design, code development, and testing, leveraging a strong background in people management and team leadership.
- Insightful expertise in Project Management using Agile & Scrum Methodology with skills in directing all phases encompassing planning, defining scope, setting timelines, monitoring, inter-discipline coordination, resource planning & documentation, budgeting, vendor management & execution.
- Comprehensive experience in designing & developing applications and software as per the clients requirements with due adherence to the CMMI Level 5 Process and Product quality parameters and project budgets.
- Leveraged experience as a SW Lab In charge and all selection as well as procurement, Deployment of Development and Testing tools.
- Possess international travel experience to **Mexico** and **China** for Mega Project at Monterrey.

NOTABLE ACHIEVEMENTS

- Developed Reusable core applications such as Bulk Dispenser that improved productivity by 40%; appreciated by the Engineering Director for this initiative.
- Performed detailed design of modules such as Water Level Sensing along with their implementation, and documentation; integrated software modules developed by other team members, and performed integration testing; successfully implemented the Speed Sensing and Valve Control functionalities.
- Identified and fixed 90+ bugs by programming with IAR Eclipse Platform; integrated unit tests of Wash Cycles into a nightly-build which increased line of code coverage by 40%.
- Designed and implemented a Twinning One Wire Protocol that streamlined Motor Synchronisation; this application cut set-up time by 50% and Increased System Efficiency.
- Analyzed and modified existing codes to incorporate Unbalance Algorithm changes in the application / user requirements, wrote new codes as required.

CORE COMPETENCIES

Strategy Planning	**Embedded Software Development**	**Project Management**	**Requirement Gathering**
Agile/Scrum Methodologies	**SDLC**	**Testing**	**Code Review**
Incident & Change Management	**Root Cause Analysis**	**Client Engagements/ Stakeholder Management**	**People Management**

EDUCATION

- **Pursuing M.Tech. (AIML)** from BITS Pilani
- **2018: Executive MBA** from Symbiosis University
- **2011: MS in Software System** from BITS, Pilani
- **2007: B.E. in Electronics & Telecommunication** from Pad. Dr. D.Y. Patil Institute of Engineering & Technology, Pimpri, Pune

CERTIFICATION

- Certificate Course in Embedded System Design from Dept. of Electronic Science, University of Pune

WORK EXPERIENCE

Since Sep'21 | Siemens, Pune | Project Manager

May'19 - Sep'21 | KPIT, Pune | Associate Manager

Jul'18 - Apr'19 | Bosch, Bangalore | Associate Project Manager

Feb'17 - Jul'18 | IFB Appliances, Goa as Deputy Manager

Oct'12 - Jan'17 | Whirlpool Global Technology & Eng. Center, Pune | Global Senior Engineer (Grade - Deputy Manager)

Jan'08 - Oct'12 | Emerson Innovation Center, Pune as Software Programmer- Embedded

Key Result Areas Across The Tenure:

- Directing & undertaking large-scale, complex projects with a focus on technology transformation; verifying project progress & outstanding issues and ensuring the quality & timeliness of deliverables.
- Directing end-to-end delivery of the project, meeting internal and external objectives pertaining to:
    - Estimation, Risk, Scope, Time, Resource, Quality, Change Management, contract variations and additional services.
    - Value-adds, continuous process and productivity improvement and expectation management of team.
- Spearheading IOT Software Project Management and Proposal Preparation for new projects, involving in-depth analysis of specifications and requirements.
- Undertaking project scheduling, resource planning, and agile scheduling, along with daily standup meetings and requirement extraction.
- Managing project scope, planning, execution, and training for new resources, ensuring compliance with ECRD and SEED Standard for SQA Audits.
- Document software solutions through flowcharts, layouts, diagrams, and code comments, ensuring adherence to CMMI Level 5 Process and Product quality parameters.
- Enhance modules delivered to production by rewriting and developing new code to improve system efficiency, and report project status to clients and senior management.

TRAINING

Lean Product Development	**Product Safety**	**Class B Software Development**	**5S Principles**
Leadership Training for Team Leaders	**UML 2.0**	**Project Management Workshop for PMP**	**SQA Audit For Process Compliance**

TECHNICAL SKILLS

- **Development IDE:** Eclipse, ST Visual Developer, MPLAB, CS+
- **Requirements:** DNG (DOORS NEXT GENERATION), JIRA
- **Compiler:** Cosmic, IAR, Hi-Tech, CCRL, CACX and Microchip Compilers C30
- **Design:** Plant UML, IBM Rational Rhapsody Modeler for UML diagrams
- **Code Review:** Code Collaborator, PC Lint and MISRA C
- **Software Versioning:** MKS, Tortoise SVN.,RTC
- **Bug Tracking:** MKS, Bugzilla, JIRA
- **Communication Utilities:** Push Button, Wide Analyzer, Dock light and Climate Talk Sniffer
- **Project Scheduling:** JIRA,MPP and Version One, RTC for Agile Platform
- **Programming Language:** Embedded C, Motorola Assembly language and knowledge of C++
- **Microcontrollers:** ST STM8S207RB, Microchip PIC 24FJ96GA008 (16 bit), PIC18F2520, PIC18F45K20 (8 bit), Renesas RL78 and Motorola 68HC05 P18, P6, P4 Series of Microcontroller
- **Interfacing:** Pressure Sensor, Temperature Sensor, IR Sensor, Detergent Dispensers and Valve Control, Encoders, Relay, EEPROM, Gas Valve, Igniter, Flame Sensors, ECM BLDC Motors, Dip Switch, Seven Segment Display and ADC, Turbidity Sensor
- **Communication Protocols:** Wide, WIN Protocol, Twinning, Climate Talk, I2C, SPI, UART
- CLASS B UL1998 Standard for Safety Critical Software

PERSONAL DETAILS

Date of Birth: 13th May'1986
Address: Chaitanya Heights B1 Wing, Flat no 4, Near Barate Hospital, Ganpati Matha, Warje Malwadi, Pune-411058
Languages Known: English, Hindi & Marathi

ANNEXURE

Siemens, Pune

Desktop Application for Train Control System (Team Size: 12)

- This Involved the Application Development for Train Control System Desktop Application using JAVA, C++ Technology. The Project involves Software Development and Testing using Agile Methodology.

Roles:

- Engaged in Project Planning, Project Management, Risk Management, Change Management, Cost Report.
- Facilitate Technical Review and Root cause analysis

KPIT, Pune

Inverter Software Development for Multicore Platform (Team Size: 14)

- This Involved the Customer SW Integration, Configuration and Testing of BSW Stack for CPU Load Reduction. The Project involves Dual Core SW Architecture Development and Testing for Autosar Modules for electric Vehicles ECU.

Roles:

- Engaged in Project Planning, Project Management, Risk Management, MPP Update, Change Management, Cost Report.
- Facilitate Technical Review and Root cause analysis

Autosar Migration for Matlab Components (Team Size: 4)

- This Involved the Migration of Non Autosar Matlab Components to Autosar Compliance.

Roles:

- Engaged in Project Management, Risk Management

Matlab Components Unit Testing (Team Size: 5)

- This Involved the Unit Testing of MATLAB Models and generated various Reports.

Roles:

- Engaged in Project Management, Risk Management

PDU Development for 2 OEM (Team Size: 7)

- This Involved the Variant Development and testing for 2 Different OEM for Non Autosar Projects.

Roles:

- Engaged in Project Management, Risk Management

Bosch, Bangalore

Intelligent Tyre Monitoring IOT System. (Team Size: 1)

- This Involved the Tyre Monitoring Firmware Development for 2 ECU. Collect the Data from Tyres for Truck and Bus. Send data to cloud for Further Analysis.

Roles:

- Engaged in Project Management & Technical Review
- Facilitate Technical Review and Root cause analysis

Battery Monitoring IOT System. (Team Size: 1

- This Involved the Monitoring Firmware Development for 2. ECU. Collect the Data from Battery for home inverter. Send data to cloud for Further Analysis via GSM.

HMI Development for Coffee Vending machine on Android Platform (Team Size: 5)

- This Involved the HMI Application Development for Tablet using Android Platform. This Also Involves the 2 Mobile Application Development for End User and Technician for Coffee Vending Machine.

HVAC Protocol Conversion and Porting (Team Size: 1)

- This Involved the OS porting Activity for HVAC Project.

IFB Industries Ltd. Goa

Software Architecture and Process for Top Load Washing Machine Software Development. (Team Size: 1)

- This Involved the Development of 4 layer Architecture for Washing Machine from Scratch. State Engine is Defined for IFB Software Modules. Coding Standard Defined for IFB Software Team. Software Process Templates are Defined. File Format For Source Code and Header Files are Defined.

Software Development Tool Evaluation and Procurement and Deployment (Team Size: 1)

A. Development Editor: Eclipse
B. Design Tool: Plant UML
C. Code Review Tool: Code Collaborator
D. Issue Tracking, Planning, Requirement Management Tool: JIRA
E. Compilers: IAR

Auto Code Generation Utility for State Machine (Team Size: 2)

- State Machine Based Auto Code Generation Utility Is Developed for Faster and Accurate Software Development. This Utility takes the Plantuml Script as Input and Generates the State Machine code for Software Module.

Special Motion Implementation for Front Load Washing Machine (Team Size: 1)

- This Involve the Special Motion Sequence Implementation for Universal Motor for Better Wash Performance.
- Engaged in Software Development and Testing

Top Load Platform Washing Machine Software Development from Scratch (Team Size: 5)

- This is a microcontroller based Washing machine control which accepts the input from the user and controls operation of washing clothes. The washing machine consists of User interface, ECU, Pressure and Temperature Sensor, Motor, Water Valves, Detergent Control. This project includes Model specific features. This is communicating compatible controls.
- Engaged in Project Planning and Execution, Requirement Analysis, Design and software code Review.

Turbidity Sensor Interfacing (Team Size: 2)

- This is a microcontroller based Washing machine control which takes Turbidity Input from Turbidity Sensor and Operates Washing machine Cycle Duration.
- Engaged in Project Planning and Execution, Requirement Analysis, Design and Code Review.

Solar Assist Washing Machine (Team Size: 2)

- This is microcontroller based Washing machine control which accepts the input from Solar Hot Water Valve and Saves the Energy.
- Engaged in Project Planning and Execution, Requirement Analysis, Design and Code Review.

Front Load Platform Washing Machine Software Development from Scratch (Team Size: 7)

- This is a microcontroller based Washing machine control which accepts the input from the user and controls operation of washing clothes. The washing machine consists of User interface, ECU, Pressure and Temperature Sensor, BLDC Motor, Water Valves, Detergent Control. This project includes Model specific features. This is communicating compatible controls.
- Engaged in Project Planning and Execution Review, Requirement Analysis, Design and software code Review.

Whirlpool Global Technology & Eng. Center, Pune

Oven and Cooktop Projects with Agile Methodology

- This is microcontroller based Oven and Cooktop control which accepts the input from user and controls operation of Cooking. The Oven consists of User interface, ECU, Temperature Sensor, Heating Element Control. This project includes Model specific features. This is communicating compatible controls.
- Engaged in Project Scoping and Planning and Execution, Training New Resources, Requirement Analysis, Design and Development of software code with required hardware modifications.

1. **High End Top Load Washing Machine with Agile Methodology**

- This is a microcontroller based Washing machine control which accepts the input from the user and controls operation of washing clothes. The washing machine consists of User interface, ECU, Pressure and Temperature Sensor, Motor, Water Valves, Detergent Control. This project includes Model specific features. This is communicating compatible controls.
- Engaged in Project Planning and Execution, Requirement Analysis, Design and Development of software code with required hardware modifications.

Classic Top Load Washing Machine with Safety Critical Software (Team Size: 4)

- This is a microcontroller based Washing machine control which accepts the input from the user and controls operation of washing clothes. The washing machine consists of User interface, ECU, Pressure and Temperature Sensor, Motor, Water Valves, Detergent Control. This project includes Model specific features. This is legacy as well as communicating compatible controls.
- Acted as Software Lead, worked on Project planning and Execution, Requirement Analysis, Design and Development of software code with required hardware modifications.

Emerson Innovation Center, Pune

Two Stage Integrated Furnace Control (Team Size: 2)

- This is a microcontroller based furnace control which accepts the input from the thermostat and controls operation of Gas furnace. The gas furnace consists of hot surface igniter, gas valve, communicating air purging Motor and Communicating air circulating motor. This project includes customer specific features. This is legacy as well as communicating compatible controls.

Two Stage Integrated Furnace Control with Spark Ignition (Team Size: 2)

- This is a microcontroller based furnace control which accepts the input from the thermostat and controls operation of Gas furnace. The gas furnace consists of Spark Igniter, gas valve, air purging Motor and air circulating motor. This project includes 6 different types of controls with customer specific features. This includes communicating as well as legacy controls.