VIVIN T.S

ASSISTANT MANAGER – AUTOMATION | DIGITAL MANUFACTURING | OT SOFTWARE | IIoT

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PROFESSIONAL SUMMARY

Automation and Digital Manufacturing professional with 5+ years of experience spanning PLC-based machine control, OT software platforms, MES–SCADA integration, and IoT traceability systems. Currently serving as Assistant Manager – Automation at Ola Electric / Ola Cell Technology, leading Industry 4.0 initiatives for lithium-ion cell manufacturing. Platform owner of internal OT platforms AxisOS and SyncBridge, responsible for architecture, development, and deployment of scalable, 24×7 production-grade middleware and traceability systems across large factory environments. Experienced in managing cross-functional teams, global machine vendors, and full lifecycle delivery from concept to commissioning.

OVERVIEW SKILS

- PLC & Machine Control: Siemens, Omron, Mitsubishi, Beckhoff | Ladder Logic, STL, SCL | Profinet, Profibus, EtherCAT

- IIoT & Data Systems: Industrial Traceability, SQLite, MySQL, SFTP/NFS, Data Integrity & Recovery

- Programming Language : Python,VB Script, PLC Programming (Ladder , STL , SCL)

- OT Software & Middleware

- OT Software & Middleware: Python, OPC UA, MQTT, REST APIs, Windows/Linux Services, HTTPS Proxies

- MES–SCADA Integration: WinCC, Kepware, Payload Mapping, Transaction Handling

- Automation Systems: ASRS, Conveyor Systems, Sorters, Robotics, Vision & Scanner Integration

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WORK HISTORY

Assistant Manager – Automation & Digital Manufacturing, 01/2024 - Current
Ola Electric / Ola Cell Technology – Bengaluru

- - Leading automation and Industry 4.0 initiatives for lithium-ion cell manufacturing covering assembly, formation, and EOL processes.
- - Architected and Developed the AxisOS, an internal OT software platform providing standardized modules for Recipe Management, BOM, Material Master, Work Order handling, OPC Connector, and system Heartbeat monitoring.
- - Designed and delivered SyncBridge, an industrial-grade SFTP/NFS mirror and traceability backbone supporting high-volume machine data and image synchronization across hundreds of production machines with 24×7 reliability.
- - Designed OPC UA–based production middleware replacing MQTT, enabling deterministic in-station and out-station production reporting to MES systems.
- - Implemented robust MES payload handling including transaction control, retry mechanisms, and fault isolation for production-critical integrations.
- - Developed Python-based control logic for conveyor and lift systems under internal ONDC initiatives, reducing dependency on PLC-only control.

- - Coordinating with global machine vendors (WUXI, LEAD) for PLC standards, OT architecture alignment, commissioning, and integration sign-off.
- - Acting as technical bridge between Automation, MES, IT, and Machine Vendors to ensure consistent digital manufacturing standards.

Research & Development Engineer – Automation, 06/2023 - 01/2024
ADDVERB Technologies – Noida
- Developed and enhanced automation products with a focus on PLC programming, control logic, and system design.
- Performed commissioning, testing, and validation of automation solutions at client locations.
- Supported R&D activities for ASRS, conveyor, and sorter systems, ensuring functional and performance compliance.
- Collaborated with cross-functional teams for product delivery and on-site troubleshooting.
- Addverb is a global robotics and intralogistics automation company.

System Engineer, 01/2023 - 05/2023
Murrelektronik – Chennai
- Designed Remote I/O architectures based on machine and process requirements.
- Developed and supported PLC programs for machine automation workflows.
- Assisted in system integration, testing, and deployment for industrial automation projects.
- Resolved complex technical issues through effective problem-solving techniques and root cause analysis.

Automation Engineer / After-Sales Engineer, 11/2018 - 11/2020
ADDVERB Technologies – Noida
- Developed, tested, and commissioned PLC control logic for large-scale warehouse automation projects.
- Executed ASRS and conveyor automation systems for enterprise customers including Reliance, HUL, Flipkart, and FSC.
- Managed on-site commissioning activities, issue resolution, and customer handover.
- Coordinated with internal engineering teams to ensure on-time project delivery and system stability.

EDUCATION

Master of Computer Application (MCA): Artificial Intelligence, Expected in 06/2026
Amity University - Noida, India
- Specialized in Artificial Intelligence with strong emphasis on applied computing.
- Academic focus areas include:
- Database Management Systems
- Data Structures & Algorithms
- Mathematics & Statistics for Computing
- Programming & Software Development (Python)
- Exposure to combining software engineering principles with data-driven and intelligent systems, aligned with digital manufacturing and automation use cases.

Bachelor of Engineering (B.E.): Mechatronics Engineering, 04/2023
Rajalakshmi Engineering College - Chennai, India
- Graduated in April 2023.
- Strong foundation in mechatronics systems, control theory, and embedded systems.
- Proficient in motion control, kinematics, dynamics, and robotics, forming the base for industrial automation and machine control roles.
- Programming Language : Python , VB Script

Diploma in Mechatronics (Sandwich Course): 11/2018
T.S. Srinivasan Centre For Polytechnic College & Advanced Training (CPAT-TVS) - Chennai, India
- Acquired strong practical and theoretical knowledge in:
- Control systems
- PLC logic development
- Industrial robotics
- Early hands-on exposure to shop-floor automation and industrial practices.
- Programming Language : Python , PLC Programming (Ladder , STL , SCL)

──────────────── SKILLS ────────────────

PLC, Controls & Machine Automation:
- PLC Programming: Siemens, Omron, Mitsubishi
- PLC Languages: Ladder Logic, STL, SCL
- Motion & Machine Control: Conveyor systems, ASRS, Sorters, Gantry-based automation
- Robotics & Devices: Gantry robot programming, industrial motion systems
- Remote I/O Systems: Murrelektronik Remote I/O architecture and configuration

Industrial Communication & Protocols:
- OPC UA (client/server, machine-to-MES integration)
- MQTT
- Industrial Protocols: Profinet, Profibus, EtherCAT, Industrial Ethernet
- **IT/OT Networking:** Factory network integration, segmented OT networks

OT Software, Middleware & Application Development
- Python Programming (production-grade middleware, control logic, services)
- REST APIs / HTTPS Services (MES–SCADA integration)
- OPC Middleware Development (deterministic production reporting)
- Node-RED (industrial data flow and integration logic)

SCADA, MES & Industrial Platforms:
- Siemens WinCC SCADA
- Kepware Server
- MES Integration (payload mapping, transaction handling)
- WCS Integration (warehouse control systems)
  IoT, Data & Traceability Systems
- IoT 4.0 Architectures
- Production Traceability Systems (lot-based, event-driven)
- Data Persistence: MySQL, SQLite
- Monitoring & Visualization: Grafana
- **Industrial File Systems:** SFTP, NFS (high-volume machine data & image handling)

Vision, Scanners & Field Devices:
- Cognex Vision & Scanner Integration
- Omron Vision & Scanner Integration
- Pepperl+Fuchs (P&F) Scanner Integration

Automation:
- Warehouse Automation (ASRS, conveyors, sorters)
- Cell Manufacturing Automation (Assembly, Formation, EOL)
- Digital Manufacturing & Smart Factory Systems

Software

VSCode

Intermediate

Visual Studio

Intermediate

Siemens TIA Portal

Upper intermediate

Siemens Wincc Scada

Upper intermediate

Kepware

Upper intermediate

Mysql

Intermediate

Languages

English

Advanced

Tamil

Bilingual or Proficient

Hindi

Elementary

Personal Information

Availability: India & Global Mobility