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Professional Summary

Automation Engineer with experience across multiple automation systems and technologies.

Educational Qualification

Bachelor of Electronics & Instrumentation Engineering

Work Experience

12+ years of experience in Industrial Automation & Control System

Industry, Products & Process Expertise

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| Industry Experience | Products Experience | Processes |
| FMCG | * Rockwell PLC L7X, L6X * Rockwell Panel view Plus 600 to 1500 * Siemens PLC- S7300 * B & R PLCs and their HMI TA 150 * EATON PLCs * Servo drives kinetic 300 * Robots like Kawasaki, Etc. * Virtual Commissioning | * PKG machines * Fryers heat & control * Palletization * Wastewater treatment plant sludge treatment * Pototo’s unloading conveyers automation * Pick & place |

Industry Norms, Standards

FORD FNA & APA Standard

FIAT EMEA Standard

TATA & JAGUAR DCP Standard

Skills & Competencies

| System | Make/ Brand | Tools and Software |
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| Potato unloading |  |  |
| PLC | Rockwell and EATON | * Rockwell RS Logix 5000 V17 to V34 * Compact logix & Control Logix * Easy Soft Pro * Easy 82XX Series |
| PLC | Siemens and B & R | * Siemens Step 7 300 * Siemens Step 7 Simatic Manager * B & R Series |
| CNC |  |  |
| SCADA/HMI | Rockwell, Siemens and Mitsubishi | * FT View Studio ME * FT View Studio SE * TIA V14 to V17 * WinCC Flexible 2008 * GT Designer |
| Communication Protocol |  | * Profinet * Interbus * Ethernet * OPC * CC link * Modbus |
| Third Party Device Interfacing |  | * Fanuc, Kuka, ABB, Comau Kawasaki Robot Interfacing * PLC-PLC interfacing * PLC-Valve banks interfacing * PLC-Scanner interfacing * PLC-Patvin Sealant interfacing * PLC-Servo Drives interfacing |

Project Experience

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| Project Name | BIW Robotics Cell Automation – Tata BOLT & ZEST |
| Location | India |
| End-Client | Tata Motors |
| Scope | Existing all BIW lines modification for new variant, Some new Robot, Drives, Valve-bank, Turntable and IO cards addition and final commission for new variant production |
| Processes/ Products | BIW Robotics cell with Welding, Sealant, Stud and Part handling |
| Project Systems | * Rockwell: RS logix 5000 V17 for PLC L63 * Rockwell: Versa Studio 3.2 for HMI Versa View 1200 * Inter-bus: IBS CMD for Inter-bus communication protocol * Pilz: Safety * **DCP** Programming Standard |
| Responsibilities | * Preparing IO list and making offline PLC back up * Preparing Excel sheet for HMI development with screen * New hardware addition and Inter-bus fault rectification * IO testing and Manual action checking * HMI testing for new modification onsite * Drive configuration and testing * Robot configuration and testing * Safety checking (E-stop, Fence) with machines * Dry run with slow speed with debugging * Auto trial with Part * Data flow checking with Vehicle build * Cycle time optimization for Cylinder sequence, operation in-between gap, Robot path suggestion, etc. |

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| Project Name | BIW Robotics Framer Cell Automation – Ford Figo Aspire |
| Location | India |
| End-Client | Ford Motors |
| Scope | New framer cell integration and commissioning, Robot, Drives, Valve-bank, Turntable and IO cards addition and final commission for production |
| Processes/ Products | BIW Robotics cell with Welding, Framer gate movement operation for different variants |
| Project Systems | * Rockwell: RS logix 5000 V20 for PLC L73ES * Rockwell: FT View Studio 8 for HMI Panel view 1200 * **FNA and APA** Programming Standard |
| Responsibilities | * Preparing Flow of operation of Framer gate movement priority variant wise * Preparing IO list and making offline PLC back up * Preparing Excel sheet for HMI development with screen * New hardware addition and Ethernet fault rectification * IO testing and Manual action checking * HMI testing for new modification onsite * Drive configuration and testing * Robot configuration and testing * Safety checking (E-stop, Fence) with machines * Dry run with slow speed with debugging * Auto trial with Part * Data flow checking with Vehicle build * Cycle time optimization for Cylinder sequence, operation in-between gap, Robot path suggestion, etc. * MES system communication and required data sending to MES. |

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| Project Name | BIW Robotics Cell Automation – Tata Nexon |
| Location | India |
| End-Client | Tata Motors |
| Scope | Existing all BIW lines modification for new variant, Some new Robot, Drives, Valve-bank, Turntable, HMI and IO cards addition and final commission for new variant production |
| Processes/ Products | BIW Robotics cell with Welding, Sealant, Stud and Part handling |
| Project Systems | * Rockwell: RS logix 5000 V17 for PLC L63 * Rockwell: Versa Studio 3.2 for HMI Versa View 1200 * Rockwell: FT View Studio 8 for HMI Panel View 1500 * Inter-bus: IBS CMD for Inter-bus communication protocol * Pilz: Safety * **DCP** Programming Standard |
| Responsibilities | * Team Management and on site client co ordination * Preparing IO list and making offline PLC back up * Preparing Excel sheet for HMI development with screen * New hardware addition and Inter-bus fault rectification * IO testing and Manual action checking * HMI testing for new modification onsite * Drive configuration and testing * Robot configuration and testing * Safety checking (E-stop, Fence) with machines * Dry run with slow speed with debugging * Auto trial with Part * Data flow checking with Vehicle build * Cycle time optimization for Cylinder sequence, operation in-between gap, Robot path suggestion, etc. |

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| Project Name | BIW Robotics Cell Automation – Fiat 556/596 Jeep compass |
| Location | India |
| End-Client | FIAT Motors (2 Project Executed 2017 & 2021) |
| Scope | New body shop installation and commissioning, All new Robot, Drives, Valve-bank, Turntable, PRB, Lifters, HMI and IO cards addition and final commission for new variant production with PLC/HMI H/W S/W upgradation |
| Processes/ Products | BIW Robotics cell with Welding, Sealant, Stud and Part handling |
| Project Systems | * Rockwell: RS logix 5000 V20 for PLC L73/83ES * Rockwell: FT View Studio 8 for HMI Panel View 1500 * **EMEA** Programming Standard |
| Responsibilities | * Preparing Flow of operation of Framer gate movement priority variant wise * Team Management and on site client co ordination * Preparing IO list and making offline PLC back up * Preparing Excel sheet for HMI development with screen * New hardware addition and Ethernet fault rectification * IO testing and Manual action checking * HMI testing for new modification onsite * Drive configuration and testing * Robot configuration and testing * Safety checking (E-stop, Fence) with machines * Dry run with slow speed with debugging * Auto trial with Part * Data flow checking with Vehicle build * Cycle time optimization for Cylinder sequence, operation in-between gap, Robot path suggestion, etc. |

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| Project Name | Building Automation – West car park |
| Location | India |
| End-Client | FIAT Motors |
| Scope | Installation of Parking light sensors, indication, AHU, FCU, VAV, Elevators and Lift |
| Processes/ Products | Manual Parking system with building automation |
| Project Systems | * Siemens: Simatic Manager for PLC S7-300-400 * Siemens: TIA V13 for HMI KTP 700 * Siemens: Wincc for SCADA |
| Responsibilities | * Preparing IO list and making offline PLC back up * Preparing Excel sheet for HMI development with screen * New hardware addition and Profinet fault rectification * IO testing and Manual action checking * SCADA/HMI testing for onsite * Auto trial with failure conditions |

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| Project Name | Material Handling – John Deere Engine shifting |
| Location | India |
| End-Client | John Deere |
| Scope | Installation and Commissioning of EMS system |
| Processes/ Products | Shifting Engine to Quality testing machine and return to conveyer |
| Project Systems | * Siemens: TIA V13 For PLC S7-1200 * Siemens: TIA V13 for HMI KTP 700 |
| Responsibilities | * Preparing IO list and making offline PLC back up * Preparing Excel sheet for HMI development with screen * New hardware addition and Profinet fault rectification * IO testing and Manual action checking * HMI testing for onsite * Safety checking * Auto trial with failure conditions |

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| Project Name | Material Handling – Metalsa Chassis shifting |
| Location | India |
| End-Client | Metalsa |
| Scope | Installation and Commissioning of EMS system |
| Processes/ Products | Shifting Engine to Quality testing machine and return to conveyer |
| Project Systems | * Siemens: TIA V13 For PLC S7-1200 * Siemens: TIA V13 for HMI KTP 700 |
| Responsibilities | * Preparing IO list and making offline PLC back up * Preparing Excel sheet for HMI development with screen * New hardware addition and Profinet fault rectification * IO testing and Manual action checking * HMI testing for onsite * Safety checking * Auto trial with failure conditions |

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| Project Name | BIW Robotics Cell Automation – Tata Ace Edge |
| Location | India |
| End-Client | Tata Motors |
| Scope | Commercial vehicle body shop installation and commissioning, All new Robot, Drives, Valve-bank, Turntable, PRB, Lifters, HMI and IO cards addition and final commission for new variant production |
| Processes/ Products | BIW Robotics cell with Welding, Sealant, Stud and Part handling |
| Project Systems | * Siemens: TIA V13 For PLC S7-1500 * Siemens: TIA V13 for HMI TP 1200 |
| Responsibilities | * Team Management and on site client co ordination * Preparing IO list and making offline PLC back up * Preparing Excel sheet for HMI development with screen * New hardware addition and Profinet fault rectification * IO testing and Manual action checking * HMI testing for new modification onsite * Drive configuration and testing * Robot configuration and testing * Safety checking (E-stop, Fence) with machines * Dry run with slow speed with debugging * Auto trial with Part * Data flow checking with Vehicle build * Cycle time optimization for Cylinder sequence, operation in-between gap, Robot path suggestion, etc. |

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| Project Name | Machine Connectivity – Mahindra (MES) |
| Location | India |
| End-Client | Mahindra & Mahindra |
| Scope | Design solution for collecting data from all Weld, Paint, TCF, etc shops. Installation of all H/W and S/W required for data collection, Making network hub and communication in-between PLC’s, final data collection and testing with live system |
| Processes/ Products | All shop data collection for MES |
| Project Systems | * Siemens: TIA V13/14, Simatic Manager, * Siemens: RS logix 5000 V17/20 * Kepware OPC U/A * Anybus Ethernet to Profinet converter |
| Responsibilities | * Team Management and on site client co ordination * Preparing data collection list from each shop * Anybus hardware addition and commission * Establish communication to all PLC * IO testing with all PLC * Configure OPC for communication with KEP * Final data validation with MES screen of all shop |

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| Project Name | BIW Robotics Cell Automation – Mahindra W601/610 KUV700 |
| Location | India |
| End-Client | Mahindra & Mahindra (2 Project Executed 2019 & 2021) |
| Scope | Existing all BIW lines modification for new variant, Some new Robot, Drives, Valve-bank, Turntable and IO cards addition and final commission for new variant production with PLC/HMI H/W & S/W upgradation |
| Processes/ Products | BIW Robotics cell with Welding, Sealant, Stud and Part handling |
| Project Systems | * Rockwell: RS logix 5000 V20/32 for PLC L73/83ES * Rockwell: FT View Studio 8/12 for HMI Panel View 1500 * **Mahindra** Programming Standard |
| Responsibilities | * Kick-off meeting with Client to start and execute project and discuss project execution against timeline * Client meeting for Work planning, Technical discussion, etc. * Cross function co-ordination for technical discussion, document preparation, etc. * Hours/Cost and Resource Estimation based on philosophy and timeline * Team Management and on site client co ordination * Logic standard finalization with client * Preparing IO list and making offline PLC back up * Preparing Excel sheet for HMI development with screen * New hardware addition and Ethernet fault rectification * IO testing and Manual action checking * HMI testing for new modification onsite * Drive configuration and testing * Robot configuration and testing * Safety checking (E-stop, Fence) with machines * Dry run with slow speed with debugging * Auto trial with Part * Data flow checking with Vehicle build * Cycle time optimization for Cylinder sequence, operation in-between gap, Robot path suggestion, etc. |

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| Project Name | BIW Robotics Cell Automation – TVS Muffler Apache Silencer |
| Location | India |
| End-Client | TVS Motors |
| Scope | New 6 small cell installation and commissioning, Some new Robot, Drives, Valve-bank, Turntable and IO cards addition and final commission for new variant production |
| Processes/ Products | BIW Robotics cell with Arc Welding |
| Project Systems | * Mitsubishi: GX Works 2 for PLC Q series * Mitsubishi: GT Developer 3 for HMI * Mitsubishi: Code-sys for HMI inbuilt PLC GOC Toolkit * **TVS** Programming Standard |
| Responsibilities | * Kick-off meeting with Client to start and execute project and discuss project execution against timeline * Client meeting for Work planning, Technical discussion, etc. * Cross function co-ordination for technical discussion, document preparation, etc. * Hours/Cost and Resource Estimation based on philosophy and timeline * Team Management and on site client co ordination * Logic standard finalization with client * Preparing IO list and making offline PLC back up * Preparing Excel sheet for HMI development with screen * New hardware addition and CC Link fault rectification * IO testing and Manual action checking * HMI testing for new modification onsite * Drive configuration and testing * Robot configuration and testing * Safety checking (E-stop, Fence) with machines * Dry run with slow speed with debugging * Auto trial with Part * Data flow checking with Vehicle build * Cycle time optimization for Cylinder sequence, operation in-between gap, Robot path suggestion, etc. |

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| Project Name | BIW Robotics Cell Automation – Tata Harrier |
| Location | India |
| End-Client | Tata Motors |
| Scope | Existing all body shop modification and commissioning, some new Robot, Drives, Valve-bank, Turntable, PRB, Lifters, HMI and IO cards addition and final commission for new variant production with PLC separation and PLC addition for PLC memory concern |
| Processes/ Products | BIW Robotics cell with Welding, Sealant, Stud and Part handling |
| Project Systems | * Siemens: TIA V13 For PLC S7-1500 * Siemens: TIA V13 for HMI TP 1500 |
| Responsibilities | * Kick-off meeting with Client to start and execute project and discuss project execution against timeline * Client meeting for Work planning, Technical discussion, etc. * Cross function co-ordination for technical discussion, document preparation, etc. * Hours/Cost and Resource Estimation based on philosophy and timeline * Team Management and on site client co ordination * Preparing IO list and making offline PLC back up * Preparing Excel sheet for HMI development with screen * New hardware addition and Profinet fault rectification * IO testing and Manual action checking * HMI testing for new modification onsite * Drive configuration and testing * Robot configuration and testing * Safety checking (E-stop, Fence) with machines * Dry run with slow speed with debugging * Auto trial with Part * Data flow checking with Vehicle build * Cycle time optimization for Cylinder sequence, operation in-between gap, Robot path suggestion, etc. |

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| Project Name | BIW Robotics Cell Automation – Tata Altroz & Punch |
| Location | India |
| End-Client | Tata Motors |
| Scope | New 2 sunroof cell installation & commissioning for new variant, 2 new Robot, Valve-bank, Turntable and IO cards addition and final commission for new variant production |
| Processes/ Products | BIW Robotics cell with Hemming and Part handling |
| Project Systems | * Rockwell: RS logix 5000 V34 for PLC L83ES * Rockwell: FT View Studio 12 for HMI Panel View 1500 * **Tata** Programming Standard |
| Responsibilities | * Kick-off meeting with Client to start and execute project and discuss project execution against timeline * Client meeting for Work planning, Technical discussion, etc. * Cross function co-ordination for technical discussion, document preparation, etc. * Hours/Cost and Resource Estimation based on philosophy and timeline * Team Management and on site client co ordination * Logic standard finalization with client * Preparing IO list and making offline PLC back up * Preparing Excel sheet for HMI development with screen * New hardware addition and Ethernet fault rectification * IO testing and Manual action checking * HMI testing for new modification onsite * Drive configuration and testing * Robot configuration and testing * Safety checking (E-stop, Fence) with machines * Dry run with slow speed with debugging * Auto trial with Part * Data flow checking with Vehicle build * Cycle time optimization for Cylinder sequence, operation in-between gap, Robot path suggestion, etc. |

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| Project Name | BIW Robotics Cell Automation – Tata Nova EV |
| Location | India |
| End-Client | Tata Motors |
| Scope | Existing all BIW lines modification for new variant, Some new Robot, Drives, Valve-bank, Turntable and IO cards addition and final commission for new variant production with PLC/HMI H/W & S/W upgradation |
| Processes/ Products | BIW Robotics cell with Welding, Sealant, Stud and Part handling |
| Project Systems | * Rockwell: RS logix 5000 V34 for PLC L83ES * Rockwell: FT View Studio 8/12 for HMI Panel View 1500 * **Tata** Programming Standard |
| Responsibilities | * Kick-off meeting with Client to start and execute project and discuss project execution against timeline * Client meeting for Work planning, Technical discussion, etc. * Cross function co-ordination for technical discussion, document preparation, etc. * Hours/Cost and Resource Estimation based on philosophy and timeline * Team Management and on site client co ordination * Logic standard finalization with client * MES schemes finalization i.e. comm. protocol, buffer size, modification access & etc. * OMS schemes finalization i.e. Line & station data receive, Scanner/printer/tag for physical cab build track, part marriage checking, wrong cab build Poka-yoke & etc. * Preparing IO list and making offline PLC back up * Preparing Excel sheet for HMI development with screen * New hardware addition and Ethernet fault rectification * IO testing and Manual action checking * HMI testing for new modification onsite * Drive configuration and testing * Robot configuration and testing * Safety checking (E-stop, Fence) with machines * Dry run with slow speed with debugging * Auto trial with Part * Data flow checking with Vehicle build * Cycle time optimization for Cylinder sequence, operation in-between gap, Robot path suggestion, etc. |

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| Project Name | Virtual Commissioning Robotics Cell Automation – Maruti YNC |
| Location | India |
| End-Client | Maruti Suzuki |
| Scope | Making offline logic/HMI development and successfully commissioned at Virtual Commission in Process simulate software with Rockwell PLC with Hardware in loop mode |
| Processes/ Products | BIW Robotics cell with Welding, Sealant, Stud and Part handling |
| Project Systems | * Mitsubishi: GX Works 2 for PLC Q series * Mitsubishi: GT Designer 3 for HMI * Mitsubishi: MX OPC communication * Siemens: Process Simulate PS * **Maruti** Programming Standard |
| Responsibilities | * Kick-off meeting with Client to start and execute project and discuss project execution against timeline * Client meeting for Work planning, Technical discussion, etc. * Cross function co-ordination for technical discussion, document preparation, etc. * Hours/Cost and Resource Estimation based on philosophy and timeline * Team Management and on site client co ordination * Logic standard finalization with client * MES schemes finalization i.e. comm. protocol, buffer size, modification access & etc. * OMS schemes finalization i.e. Line & station data receive, Scanner/printer/tag for physical cab build track, part marriage checking, wrong cab build Poka-yoke & etc. * Making tag list for logic block of PS software and MX OPC * Configuring Rockwell FT Echo and PS for communication * Preparing IO list and making offline PLC back up * Preparing Excel sheet for HMI development with screen * IO testing and Manual action checking * HMI testing for new modification onsite * Drive configuration and testing * Robot configuration and testing * Safety checking (E-stop, Fence) with machines * Dry run with slow speed with debugging in PS * Auto trial with Part in PS * Data flow checking with Vehicle build * Cycle time optimization for Cylinder sequence, operation in-between gap, Robot path suggestion, etc. |

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| Project Name | Virtual Commissioning Robotics Cell Automation – M&M W610 |
| Location | India |
| End-Client | Mahindra & Mahindra |
| Scope | Making offline logic/HMI development and successfully commissioned at Virtual Commission in Process simulate software with Rockwell PLC with Software in loop mode |
| Processes/ Products | BIW Robotics cell with Welding, Sealant, Stud and Part handling |
| Project Systems | * Rockwell: RS logix 5000 V34 for PLC L83ES * Rockwell: FT View Studio 12 for HMI Panel View 1500 * Rockwell: FT Echo Emulator * Rockwell: FT linx communication * Siemens: Process Simulate PS * **Mahindra** Programming Standard |
| Responsibilities | * Kick-off meeting with Client to start and execute project and discuss project execution against timeline * Client meeting for Work planning, Technical discussion, etc. * Cross function co-ordination for technical discussion, document preparation, etc. * Hours/Cost and Resource Estimation based on philosophy and timeline * Team Management and on site client co ordination * Logic standard finalization with client * MES schemes finalization i.e. comm. protocol, buffer size, modification access & etc. * OMS schemes finalization i.e. Line & station data receive, Scanner/printer/tag for physical cab build track, part marriage checking, wrong cab build Poka-yoke & etc. * Making tag list for logic block of PS software * Configuring Rockwell FT Echo and PS for communication * Preparing IO list and making offline PLC back up * Preparing Excel sheet for HMI development with screen * IO testing and Manual action checking * HMI testing for new modification onsite * Drive configuration and testing * Robot configuration and testing * Safety checking (E-stop, Fence) with machines * Dry run with slow speed with debugging in PS * Auto trial with Part in PS * Data flow checking with Vehicle build * Cycle time optimization for Cylinder sequence, operation in-between gap, Robot path suggestion, etc. |