

SAYOOJ RAJEEVAN A

Robotics & Automation Engineer

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PROFILE SUMMARY

Robotics & Automation Engineer with nearly 4 years of hands-on experience deploying industrial robot cells that cut cycle times, raise throughput, and go live on schedule. Proven across ABB, KUKA, FANUC, Yaskawa, Kawasaki, Mitsubishi, Epson, OTC, and Elite platforms in aerospace, automotive, electronics, FMCG, and paint industries. Combines deep robot programming and PLC integration expertise with Python-based industrial automation and data integration and a track record of leading multi-disciplinary teams from concept through customer acceptance.

KEY TECHNICAL SKILLS /SOFTWARES

Robot Brands	ABB · KUKA · FANUC · Elite · Mitsubishi · Epson · OTC Daihen · Kawasaki · Yaskawa ·Panasonic
Robot Software	ABB Robot Studio (OLP/Virtual Commissioning) · KUKA Sim · RT Toolbox 3 · Epson RC+ 7 · Work Visual
PLC / HMI	Siemens TIA Portal · Siemens HMI
Protocols	PROFINET · CC-Link · Ethernet/IP · TCP/IP · DeviceNET · Modbus
Programming	RAPID (ABB) · KRL (KUKA) · FANUC TP · MELFA(MITSUBISHI) · SPEL +(EPSON) · INFORM(YASKAWA) AS(KAWASAKI) · LUA/JBI (ELITE) · PYTHON
Software	AutoCAD · Microsoft Office · Visual Studio · Univision
Management	Project planning & leadership · Multi-disciplinary team coordination · Customer acceptance testing · Cycle-time & fault analysis
Applications	· Material handling · Painting · Spot welding · Mig welding · Tig welding · Sealant dispensing · Drilling

WORK EXPERIENCE

Berht Robotics Pvt. Ltd. | Robotics Engineer

Aug 2025 – Present

- Slashed integration timelines by developing and commissioning turnkey robotic cells across welding, laser processing, painting, dispensing, palletizing, and material handling — creating production-ready systems delivered to customer acceptance.
- Reduced communication delays and rework by integrating ABB, KUKA, FANUC, Mitsubishi, and Elite robots with Siemens & Mitsubishi PLCs over PROFINET, CC-Link, Ethernet, and TCP/IP.
- Enabled faster arc-welding sign-off at automotive customers by programming and commissioning ABB tank welding cells with Fronius welding equipment and Siemens PLC control.
- Improved automotive weld quality consistency by developing FANUC spot welding applications with Obara guns, reducing setup iterations for production launch.
- Achieved precision laser-weld requirements for critical joints by commissioning KUKA laser welding cells integrated with Scansonic sensors and TRUMPF laser controllers.
- Deployed Elite robot paint-spraying lines with 7th-axis gantry and PROFINET communication, expanding the company's capability in surface-finishing automation.

- Accelerated sealant-dispensing process repeatability by programming Epson robots integrated with Siemens PLCs, eliminating manual application variability.
- Built a Python socket communication layer with ABB robots for real-time data exchange, enabling live process monitoring without hardware investment.
- Automated Siemens PLC Data Block read/write via Python, delivering real-time industrial data acquisition used for production dashboards and quality traceability.
- Increased team transparency and project visibility by designing and deploying an internal web application for robotics activity tracking, project monitoring, and automated reporting — integrated with Google Sheets and hosted on Render.
- Validated robot applications using ABB RobotStudio OLP and virtual commissioning, catching reach and collision issues before physical installation and saving costly on-site rework.

Wipro Pari Ltd., Pune | Field Service Engineer

May 2025 – Aug 2025

- Delivered a production-ready ABB pick-and-place cell, including RAPID program development, I/O validation, and PLC-to-robot communication — commissioned on schedule.
- Improved material handling reliability by optimising ABB RAPID programs for cycle-time efficiency, reducing idle motion and fault frequency during commissioning.

BGR NEO Ltd. | Controls Engineer

Oct 2022 – May 2025

- Led a team in delivering high-precision robotic drilling cells at Tata Lockheed Martin Aerospace using ABB, cutting manual drilling time and improving hole-position accuracy for aerospace-grade tolerances.
- Commissioned ABB palletizing system at Bluestar India Climatech with a pneumatic gripper in a 3x5 pallet layout, increasing packing throughput and reducing manual handling injuries.
- Led project execution for robotic pick-and-place and palletizing systems at Pidilite Industries by developing modular KUKA programs with structured logic — deployed after full KUKA Sim reach and collision validation.
- Enabled multi-layer palletizing with variable orientations at Pidilite Industries using KUKA Krl with offset and array-based KRL logic, eliminating reprogramming between product changeovers.
- Commissioned ABB waterjet deburring cell at Tata Electronics, automating a hazardous manual process and standardising deburring quality across production batches.
- Reduced project delivery risk across all programmes by performing offline simulation, reach studies, collision analysis, and cycle-time optimisation in ABB RobotStudio and KUKA Sim before site mobilisation.
- Developed Siemens PLC and HMI applications for machine control, process monitoring, and operator interfaces, ensuring seamless robot-to-line integration.

EDUCATION

NTTF – Diploma in Mechatronics Engineering - First class with distinction

June 2019 – July 2022

EXTRA -CURRICULAR

Cricket, swimming, Nature exploration

LANGUAGES

English (Fluent) · Malayalam (Fluent) · Tamil (Fluent) · Hindi (Intermediate)