

BAWANDEEP SINGH

EXCELLENCE AREAS

- Fanuc Roboguide
- Robotics & Automation
- Control Systems
- HMI (Human Machine Interface)
- I/O Logic Circuits
- Productivity 2000
- Optimization Techniques
- Machine Processing
- Press Controls
- Robot Programming
- Safety & Quality Standards
- ABB Robo Studio
- Inductive Automation Ignition
- Robotic Systems
- Computer-Aided Mechanical Design
- Injection Moulding
- Industrial Automation
- Processing Parameters
- Troubleshooting
- Faults Analysis
- Motion Planning
- Automation Equipment Proficiency

TECHNICAL EXPERTISE

Automation Software: Productivity Suite | STEP 7 | RS Logix 5000/500 | RS Linx 500 | Melsoft GX Works3 | WPL Soft | Factory IO | ITS PLC |

Drawing Software: Fusion 360 | AutoCAD | Solid Works | Aspire by Vectric

Electronics Software: NI (MultiSim 11.0, LabVIEW)

Programming Languages: C | Ladder Logic | FBD | STL | CNC

Basic knowledge of Computer Hardware | Operating Systems (XP/7/8/10)

EDUCATION

- Electro Mechanical Engineering Technician ⬅ Centennial College | 2020
- Advance Diploma in Mechatronics and Industrial Automation** ⬅ INDO-SWISS Training Centre, CSIO, Chandigarh | 2016 | 70%
- Senior Secondary ⬅ NIOS | 2014 | 59.4%
- Higher Secondary ⬅ CBSE | 2011 | 8.6 CGPA

Academic Achievements:

- Ranked #4** in National-level Automation competition Mitsubishi Electric Cup, VIT, Pune; **facilitated communication between PLC and Raspberry Pi via ethernet using Modbus.**

PERSONAL SNIPPETS

Date of Birth: 18th December 1994
Language Proficiency: English, French, Punjabi
Address: 34 Durham Street, Kitchener, Canada

INDUSTRIAL AUTOMATION & ROBOTICS ADMINISTRATION PROFESSIONAL

A qualified Electro-Mechanical Engineer and Automation & Robotics Expert; **Top Performer** and **Rank holder** in National-level Automation competition Mitsubishi Electric Cup, VIT, Pune for facilitating communication between PLC and Raspberry Pi via ethernet using Modbus

PROFILE SYNOPSIS

- Electro Mechanical Technician** with two deployed projects; Experienced in coordinating all activities related to Project management, Planning, Estimating, Procurement, Initial Concept, 3D-designing, 2D-Drawing, BOM generation, Assembly, Wiring and PLC programming; Well versed in reading and creating documentation including Electrical Schematic, Pneumatic Schematic.
- Capable of working with electro-mechanical equipment, sensors, Pneumatic components, PLC, stepper motors and drives, automated robotic systems, and assemblies; capable of functioning efficiently in a fast-paced, cross-functional and dynamic work environment.
- Demonstrates **excellence in Fanuc Roboguide, ABB Robo Studio**, preventive and corrective maintenance on **robotic systems or components**; while ensuring to achieve Safety, Quality, and Cost priorities.
- Discerning performer**; able to re-engineer, modernize, and transform automated work cells, PLCs, HMIs, and Robotic Systems to achieve set organizational goals and drive advanced technical efficiency and services.

WORK EXPERIENCE

@ HPML, Kitchener as Automation and Controls Manager Nov '21 – Aug '22

Deliverables:

- 100% success rate on project approval by making an Initial concept that covers all bases for client and competitive quotation.
- Communicated with client through all stages of the projects and got approval for all the changes that occurred due to shipment issues.
- Performed all functions related to project completion like 3D-designing, 2D-Drawing, BOM generation, Tracking open PO, Quality Inspection, Assembly, Wiring, PLC programming and Testing.
- Learned various software's from scratch on the go like Productivity Suite, Fusion 360, SMC Draw.

@ HPML, Kitchener as CNC Machinist May '21 – Nov '21

Deliverables:

- Ran Haas VF2 in Job shop environment. Performing varies function Jig setting, Dialing, reading drawing, verifying program virtually, first cut verification, inspection and post production operations.
- Created daily, Monthly and yearly preventive maintenance charts for all equipment in the shop; Created multiple documents to obtain ISO certificate like calibration chart, SOP's, spare parts list, rating document for supplier and customer based on multiple metrics.
- Selected to be management representative for Quality Management System.

@ Ckdpack Packaging Inc., Mississauga as CNC Technician Oct '20 – May '21

Deliverables:

- Installed fully automatic mask making machine and shrink wrap machine to run production of masks.
- Installed FANUC ARC Mate robot and programmed it to run multiple batch production jobs.
- Installed a HOMAG CNC router and learned Aspire by Vectric to program the toolpaths.

@ HSIIDC, Haryana as Supervisor Aug '17 – Jul '18

Deliverables:

- Performed troubleshooting of major systems; resolved failures and malfunctions.
- Supervised maintenance personnel while inspecting and assessing daily operations performed by the staff; led tender openings for major/minor projects.

@ Fanuc India, Bangalore as Maintenance Technician

Jan '17 – Jun '17

Deliverables:

- Spearheaded maintenance and repairing functions of Fanuc Servo motors, controller and amplifiers while identifying and replacing damaged parts.
- Installed and tested new parts; ensured smooth working of servo and series motor.

@ Exicom, Gurgaon as DET

Sep '16 – Dec '16

Deliverables:

- Performed testing and repairing of SMPS units while driving supervision of assembly line; identified problems and drove workable solutions for a seamless working of the product.

PROJECTS ADMINISTRED

- 3 Ply Face Mask Nose Pin Removal Machine □ HPML
- Automatic Glue application and cut to length machine □ HPML
- Automated Storage & Retrieval System (ASRS) □ Mitsubishi Electric Cup.
- Conveyor Direction & Speed Control | PLC Redundancy system | Interfacing between HMI, Stepper motor and Incremental Encoder □ NFI

TRAININGS & INTERNSHIP PURVIEW

- **Training in Industrial Automations** ← NFI- Industrial Automation Training Academy | Jul '15 – Aug '15