Aniket Macwan

Toronto, ON | macwananiket10003@gmail.com | +1 437-989-0600 | Linkedin | Portfolio

PROFESSIONAL SUMMARY

Maintenance Technician with expertise in PLC programming, robotics, and system optimization.
Silver medalist at **Skills Ontario 2024**, demonstrating strong technical and problem-solving skills.

I am available to relocate to any city or province as needed for job requirements.

SKILLS

PLC / HMI / DCS:	Allen-Bradley | Siemens | Omron
Softwares:	Studio 5000 | RS Logix | TIA Portal | WinCC | Robot Studio | Fanuc TP Programming CX Programmer | CX Designer
PLC Programming:	Ladder | ST(Structured Text) | SFC(Sequential Function Chart) | FBD(Function Block Diagram)
Robotic Systems:	ABB | Fanuc
CAD Design / Panel Design:	AutoCAD Electrical | Fusion 360 | SolidWorks | Onshape | AutoCAD
Computer Programming:	Python | C++
Mechanical Maintenance:	Troubleshooting pumps gearboxes, bearings, and conveyors | Precision alignment and lubrication.
Hydraulics & Pneumatics:	Maintenance of valves, actuators, and cylinders
Project Management:	Microsoft Project | Microsoft office | EPLAN | CMMS - FIIX | Google SmartSheets | Miro
Industry Standards:	ISA | IEC | IEEE
Engineering Design Deliverables:	Interconnection diagrams | Loop Drawings | Layout drawings | Installation drawings | Control Panel Layouts | Control System Architecture | Piping and Instrumentation Diagrams (P&IDs)
Industrial Networks	Ethernet | Ethernetprotocols Modbus | Fieldbus | DeviceNet | ControlNet | Hart | Profibus DP

WORK EXPERIENCE

Maintenance Technician   May 2022 – Apr 2023
Lubi Electronics | Gandhinagar, Gujarat, India

- Repaired and maintained industrial processing equipment, including motors, pumps, and conveyor systems, resulting in a 25% reduction in equipment downtime.
- Applied Lockout/Tagout procedures(LOTO) during maintenance activities, ensuring safety and compliance with company standards.
- **Programmed** and **troubleshot PLCs** (**Allen-Bradley and Siemens**) to optimize equipment control and enhance system functionality.
- Inspected and repaired mechanical seals, gaskets, and lubrication systems to ensure proper operation of industrial pumps and compressors.
- Used blueprints and schematics to troubleshoot electrical faults and diagnose equipment issues, successfully restoring system functionality.
- Used **FIIX - CMMS** software to track maintenance schedules and log completed repairs, improving the efficiency of the maintenance team.
- Utilized **Microsoft Office Suite** for maintenance planning and reporting, improving communication and documentation across the team.

Lab Technician   Sep 2023 – Aug 2024
Centennial College | Toronto, ON

- **Control Panel Building – PLC & Pneumatics Lab**: Utilized **EPLAN** to design control panels and assembled and wired **sensors**, **actuators**, **HMIs**, and **PLCs** (Siemens S7-1200, Allen-Bradley CompactLogix) in compliance with **Canadian Electrical Code.**
- Designed and created a Bill of Materials (BOM) for a control system workbench.
- Designed and wired **Rexroth DCVs**, MCR, power supply, and **PLCs** for hydraulic experiments at **4500 psi**. Enhanced system **safety** and **functionality** by 20% through **safety relay integration**.
- Designed lab apparatus using **Onshape**, reducing design iteration time by 40%. Applied **advanced CAD** skills to create precise 3D models and implemented **parametric modeling** for rapid adjustments and prototyping.
- **Troubleshooting**: Diagnosed and repaired electrical and mechanical faults, utilizing **blueprints** and **schematics** to restore system functionality and improve operational uptime.
- Programmed and troubleshot **PLC** systems using **Ladder Logic** and **Structured Text** for automation and control tasks, improving system efficiency and reliability.

EDUCATION

Automation and Robotics - Electro-Mechanical Engineering Technology (Fast-Track)   May 2023 – Aug 2024
Centennial College

- **Programmed ABB and Fanuc robots** to replicate an **automotive production line**, showcasing expertise in industrial automation and robot programming. Additionally, programmed robots for **welding tasks**, reducing cycle time by 20%.
- Executed advanced **PLC programming** to control complex sequences involving **pneumatic cylinders** and **lighting functions**, utilizing **digital** and **analog sensors** for input, meeting **industrial standards**.
- Designed and developed an **Arduino-controlled car** powered by **two 12V motors**, demonstrating proficiency in **microcontroller programming** and **electromechanical systems integration**.
- **Designed and machined** a conveyor-based color sorting system, fabricating components from aluminum in the machine shop using **lathe**, **band saw**, **milling machine**, **drill press**, and precision measuring tools such as **Vernier caliper** and **micrometer**.
- Operated **servo motors** and **vision systems** using **Omron PLC** and **Omron servo drive**, optimizing system performance and ensuring high-quality production outcomes
- Troubleshot a complex control panel for a **robotic cell**, diagnosing and resolving issues with the **power supply** and **PLC**, restoring full system functionality.

Bachelor of Science (Physics)   Nov 2019 – Apr 2022
Charusat University

- Mastered fundamental principles in classical and modern physics, alongside proficiency in mathematical and computational methods to solve complex problems and analyze physical phenomena.
- Gained proficiency in mathematical programming languages such as **Scilab** and **MATLAB** for data analysis, simulations, and model development.

ACHIEVEMENTS

Silver Medalist Skills Ontario 2024 | LINK
Mechatronics Team of 2:
- Represented Centennial College in Mechatronics as a **PLC Programmer**, achieving 2nd place (Silver Medal).
- Designed, coded, and troubleshot PLC programs for mechatronic systems, collaborating with a teammate to integrateelectrical and mechanical components.