

ARYAN SHIRSEKAR

Graduate Electrical Engineer (B.Tech) | Robotics | Control Systems & Automation | Embedded Systems | ML/AI

+91 9833507855 aryan_shirsekar@hotmail.com www.linkedin.com/in/aryan-shirsekar-a0aa76205
Reclamation, Bandra west, mumbai 400050.

SUMMARY

Electrical Engineering graduate with a strong interest in robotics, automation, and embedded technologies. Hands-on experience in PLC programming, control systems, electrical installations, motor control, CAD drafting, and hardware-software integration through academic and personal engineering projects. Passionate about developing robotic and automation solutions, with practical exposure to ROS-based robotic platforms and embedded controllers. Currently pursuing an Executive Robotics Program from Indian Institute of Technology Delhi to further strengthen technical and industry skills. Quick learner with strong problem-solving abilities, eager to contribute and grow in the fields of robotics, automation, and electrical engineering.

ELECTRICAL EXPERTISE

Electrical & Control Systems: Wiring, fault diagnosis, AC/DC motor control, and relay logic.

Instrumentation & Testing: Use of multimeters, oscilloscopes, and sensor calibration tools.

Panel Work & CAD Drafting: Electrical schematics, AutoCAD, and component layout drawings.

Maintenance & Troubleshooting: Conveyor systems, PCB repair, control panel testing.

Health & Safety: Lockout / Tag out procedures, confined space work, and hazard awareness.

Software: AutoCAD electrical, SolidWorks, MATLAB, Altium, Arduino IDE, Python.

Soft Skills: Reliable, punctual, teamwork, and strong communication on-site.

EXPERIENCE

Assistant Support & Automation technician

EastPack Limited

02/2026 - 06/2026 Tauranga, New Zealand

NZ largest kiwifruit post-harvest operation in Automated packaging line

- Supervised and Maintained continuous production flow for kiwifruit packing, preventing throughput loss by providing immediate diagnosis and technical support
- Perform daily safety check on the production line equipment
- Contact external support and coordinate with the machine specialist with major problem

Electronics Service Technician

Samsung Electronics

03/2022 - 12/2022 Auckland

Specialize in servicing Samsung products.

- Diagnosing and trouble shooting the problems with the products
- Repairing of PCB boards by soldering and resoldering of damage components or replacing main board

EDUCATION

Executive Robotics Program

Indian Institute of Technology, Delhi

03/2026 - Present Mumbai, India

Bachelor in Engineering (Electrical)

Unitec Institute of Technology (New Zealand)

06/2023 - 12/2024
Auckland, New Zealand

Diploma in Electronic Engineering

Manukau Institute of Technology (New Zealand)

02/2020 - 12/2022
Auckland, New Zealand

PROGRAMMING SKILLS

AutoCAD	C/C++	C#	
OpenCV	IoT	Java	HMI
ROS2	PLC Programming		
SCADA	Proteus	Python	
SolidWorks	ESP32	SQLite	
PCB Design			

INTERESTS

- Automation
- Robotics
- Instrumentation & Control systems
- Micro Electronics
- Machine Learning and Artificial Intelligence

EXPERIENCE

Design Engineer

SAV Engineering

📅 01/2023 - 01/2026 📍 Auckland

Engineering firm specializing in mechanical solutions

- Drafting mechanical and electrical drawings for fabricating and installations
- Conducted routine diagnostic testing, fault finding, and preventive maintenance on electrical equipment
- Prepared cost estimates and quotations from technical drawings for multiple engineering companies

PROJECTS

Installation of conveyor systems for NZ POST

- Installation of new conveyor and sorting system.
- Successfully manage to fabricate and install necessary components of belt and pulley systems.
- Design and integrate sensors and motors into the conveyor system to achieve operational functionality.

Oji Fiber Solutions

- During the system check, I identified issues, implemented troubleshooting solutions, and performed maintenance tasks such as uncoupling the AC motor from the bucket conveyor, replacing the bucket conveyor chain, and recalibrating the motor and chain for precise control.
- Carried out replacement of industrial-size bearings and ensured proper lubrication.

Robotic Arm Project (UNITEC Institute Technology)

Developed a Robotic Arm that supports sophisticated movement and automated object detection.

- Robotic Arm 6 DOF with moveable base using ROS2.
- Used TensorFlow Algorithm to detect objects in real time.
- Design paralleled mount camera vision PCB board to determine the distance of the target along with.
- Used MATLAB and Altium software to design a PSU for charging of 24V DC system (Battery Pack) using a 230V ac and distributing its power to external systems like :- Arduino mega, Esc and Raspberry Pi.
- Applied ROS2 inverse kinematics library to determine the path to follow for the robot arm to reach its target.

Greenhouse Automation (Manukau Institute of technology)

Built an Automated Greenhouse Management Solution to regulate climate and irrigation.

- Improved crop yield by {15%} by designing a greenhouse automation system for monitoring and adjusting conditions.
- Controls temperature and humidity for optimal plant growth.

KEY ACHIEVEMENTS

★ Top Student Award

Awarded as TOP student for project in Electrical Engineering (2024 UNITEC Auckland) for an innovative Robotic Arm with sophisticated motion control.

CERTIFICATIONS

1. ROS 2 :- Basic and odometer.

3. ROS 2 :- S.L.A.M.

2. ROS 2 :- Tensor flow & OpenCV

4. Java and JavaFX

LANGUAGES

Marathi	
Hindi	
English	