SAHABDEEN MOHAMED RINAS

581, Viyapariyar Road,
Brainthuraichenai,
Valaichenai,
Sri Lanka

25/11/2002
Srilankan
+94754323659
rinasmohamed840@gmail.com
inkedin.com/in/mohamed-rinas-9ab9312a6

Profile

Motivated Mechatronics graduate with hands-on experience in embedded systems, PLC programming, and STEM education. Skilled in microcontroller development, sensor integration, and computer vision. Passionate about solving real-world problems through innovation, teamwork, and continuous learning. Seeking a technical role where I can grow through practical challenges and contribute to high-impact projects in automation, robotics, or sustainable engineering.

Experience

07/2024 – 01/2025   **Mechanic Unit (Trainee)**
                                         Lootah Garments (PVT) Ltd.

- Maintained and troubleshot automated garment machinery
- Calibrated sensors and supported motor control setups
- Gained exposure to industrial safety and lean manufacturing
- Operated automated garment machinery to support daily production

05/08/2025 – 06/08/2025   **Workshop Instructor**
                                         Vidatha Resource centre, Koralaipattu West.

2 -day workshop on STEM Education program have organized by Vidatha Resource Centre, Koralaipattu West, Divisional Secretary for School A/l level Engineering Technology Students. I was assigned to taught the Robotics, Arduino programming and AI in Tamil medium. At the end of the two-day workshop, participation certificates were distributed to all the students. The certificates were issued and handed over by Vidatha Resource Centre, KPW, DS Office, acknowledging the students active involvement and enthusiasm throughout the session.

Robotics & STEM Instructor (Grades 5–9) Ongoing

• Conducting practical robotics classes for students from Grade 5 to Grade 9

•Teaching basic electricity and electronics concepts as foundation

• Guiding students through hydraulic-based projects to understand mechanical principles

• Introducing Arduino programming and sensor integration for hands-on automation projects

Projects

- Face Detection Lock System – Arduino + OpenCV for AI-based access control
- PLC Bottle Filling Simulation – Siemens PLCsim + Factory I/O with ladder logic
- Hydraulic Arm – Syringe-based actuation for STEM workshops
- ESP32-CAM Object Detection – Smart surveillance automation
- Forward & Reverse Motor Connection – Practical wiring and control of single-phase motor using contactors and switches

Technical Skills

Advanced

- PLC programming (Siemens & Omron)
- PLC simulation (PLCsim, Factory I/O)
- Arduino, ESP8266, ESP32
- Python programming (Arduino IDE)
- OpenCV integration with Arduino
- Sensor calibration, PWM control, circuit debugging
- MQTT, HTTP, WiFi communication
- HMI design basics (simulation panels for PLC projects)

Intermediate

- 3D design with TinkerCAD
- Basic MATLAB

Learning

- Industrial communication protocols: Modbus (RS485/RTU/TCP), Profibus
- Motor control with VFD integration
- SCADA fundamentals (data acquisition & monitoring in simulation environments)
- PID control basics (proportional, integral, derivative tuning for automation)

Soft Skills

- Independent and team-based work
- Troubleshooting and problem-solving
- Teaching and communication
- Visual guide creation
- Self-learning and adaptability

Education

Diploma in Mechatronics(complete)

University College of Jaffna (2023-2025)

- Focus: Applied Electronics, Applied Electricity, PLC, control systems, Pneumatics, Electro Pneumatics, Hydraulics, Electro Hydraulics

Language

- Tamil
- English
- Sinhala

References

MR.S. Paheerathan

Head of department Mechatronics

Technology

University College of Jaffna

Phone: 0716464353

E-mail: paheerathan82@gmail.com

MR.V. Hiroshan

Senior lecturer

Head of Academic Mechatronics

University College of Jaffna

Phone: 0771965123

E- Mail: hiroshaanv@gmail.com