



CONTACT



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SKILLS

Professional insight

- Automation
- Robotics
- Pneumatics
- IOT
- Electronics and Electrical

Tools & Technology

- FluidSIM
- Arduino IDE
- SolidWorks , AutoCAD
- Altium
- STEP 7, TIA Portal
- SIMATIC WinCC , TouchWin

Interpersonal Skills

- Problem Solving
- Team Leadership
- Critical Thinking

PUBLICATION

Smart Alcohol Detection and
Engine Locking System

[Conference Paper](#)

LANGUAGES

- English
- Sinhala

SUMMARY

I am a results-driven undergraduate specializing in Industrial Automation & Robotics, with practical expertise in embedded systems, IoT, and real-time data acquisition. Passionate about process optimization and efficiency, I excel in dynamic, collaborative environments, applying my technical skills to deliver innovative, impactful solutions to complex challenges.

EDUCATION

- **Bachelor of Engineering Technology (BET) Honours Degree**
University of Kelaniya
2022 - PRESENT
Specializing in Industrial Automation & Robotics
- **PLC and Automation Certificate Course**
SLIR (Sri Lanka Institute of Robotics)
2024 - 2025

PROJECTS

- **Automated Apple Packing Warehouse Conveyor System**
Developed an automated apple packing system with ESP32, integrating sensors, robotic arms, and fault detection to enhance efficiency, productivity, and quality control.
- **Water Hyacinth Removal and Waste-to-Energy System**
Designed a solar-powered, autonomous machine to remove water hyacinth, utilizing IoT for monitoring and generating biogas and fertilizer from the waste.
- **Smart Alcohol Detection and Engine Locking System**
Developed a system to detect drunk driving, automatically locking the engine and sending real-time location and transport notifications for safety.
- **Design and Creation of a Pneumatic System for Industrial Application**
Engineered a pneumatic sorting system utilizing Arduino and stepper motors that achieved a 40% increase in sorting speed, while maintaining rigorous safety standards and reducing manual handling injuries by 15%.
- **HMI Programming for an Automated Bottling Line**
Designed and implemented an HMI-based control system integrated with Siemens PLC using TIA Portal to automate, monitor, and manage bottling operations, ensuring real-time control, data logging, and operational safety.
- **PID-Based Temperature Control System for a Greenhouse**
Developed an Arduino-based system using a DHT11 sensor and PID control to regulate greenhouse temperature automatically via heating and cooling elements, ensuring optimal plant growth and energy efficiency.

REFERENCE

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