

KANISHKA BANDARA RAJAKARUNA  
Production Engineer | Mechatronics & Industrial Systems  
BEng (Hons) Automotive Engineering  
*Specialization: Mechatronics, Control Systems & Industrial  
Automation*



Phone: +94 76 626 6533 | Email: [kanishka.rajakaruna1010@gmail.com](mailto:kanishka.rajakaruna1010@gmail.com) | Address: No.19,  
Kotuwegedara, Matale

LinkedIn: [linkedin.com/in/kanishka-rajakaruna-256660240](https://www.linkedin.com/in/kanishka-rajakaruna-256660240)

## PROFESSIONAL SUMMARY

---

Production Engineer with 3+ years of experience in pharmaceutical manufacturing, industrial machinery, automation, and utility systems. Strong hands-on expertise in mechanical systems (HVAC, AHUs, blow molding, sterilization equipment), electrical and electronic sensors, BMS monitoring, and equipment validation (DQ, IQ, OQ, PQ). Engineering graduate with a mechatronics-oriented background in control systems, thermodynamics, manufacturing systems, and automation. Seeking mechanical, mechatronics, automation, or production engineering roles.

## EDUCATION

---

BEng (Hons) Automotive Engineering – University of Sunderland  
(Second Class Honors – Upper Division)

Higher Diploma in Automotive Engineering – Cardiff Metropolitan University  
(Second Class Honors – Upper Division)

Key Focus Areas:

- Control System Designing
- Manufacturing System Design
- Automotive Dynamic Control

Management Modules:

- Manufacturing System Design and Maintenance
- Professional Engineering Management
- Management Principles for Automotive Engineers

## MECHATRONICS, MECHANICAL & AUTOMATION SKILLS

---

- Blow Molding & Packaging: Operation of single-step blow molding machines; experience with carton folding, pillow packing, and sterilization equipment
- HVAC & AHUs: Understanding of heating, ventilation, and air handling unit systems
- Pharmaceutical Sterilization: Knowledge of WFI, pure steam, and sterilization processes in compliance with GMP
- Utility Systems: Experience with pure steam (PS), water for injection (WFI), and both direct and indirect clean air supply systems
- Industrial Automation: Skilled in mechanical, pneumatic, and electronic sensors; experienced in SOPs and validation documentation (DQ, IQ, OQ, PQ)

## PROFESSIONAL EXPERIENCE

---

### **01. Production Engineer (March 2023 – Present) KelunLifesciences (Pvt) Ltd, Pallekale, Kandy**

#### Audit & Regulatory Work:

- Actively involved in EU-GMP audits, supporting audit preparation, production area readiness, equipment compliance, and on-site inspection activities
- Participated in NMRA audits, ensuring GMP compliance of production processes, SOPs, validation documents, and sterile manufacturing areas
- Supported ISO audits (ISO9001, ISO14001, ISO 45001) through documentation preparation, process verification, and audit follow-up actions
- Prepared, reviewed, and maintained SOPs, logbooks, batch records, and validation documentation (DQ, IQ, OQ, PQ) during audit periods
- Ensured continuous audit readiness of sterile utilities, including WFI, Pure Steam, HVAC, AHU, cleanroom environments (ISO Class 7&8), and BMS
- Assisted in deviation investigations, root cause analysis (RCA), and CAPA implementation following audit observations
- Worked extended hours during audit periods, demonstrating strong commitment and discipline to achieve successful audit outcomes

#### Key Responsibilities:

- Performed maintenance and coordination tasks in collaboration with Chinese engineers
- Supervised technician teams and managed task scheduling
- Maintained Line A (LVP – Large Volume Parenteral), prepared SOPs and executed Validation protocols
- Monitored and resolved issues in the Building Management System (BMS)
- Handled procurement and inventory of spare parts

#### Professional Experience:

- Monitored and optimized pharmaceutical production processes -
- Ensured compliance with GMP standards and industry regulations

### **02. Industrial Trainee (Mar 2022 – Aug 2022)**

Unicorn Service Center, Matale - Performed diagnostics and tuning of hybrid and conventional vehicles

- Handled mechanical instrumentation and service tools

## PROJECTS

---

### Professional Projects

#### 03. AHU Alarm System Implementation

- Designed and implemented a visual alarm system to monitor AHU (Air Handling Unit) status.
- Green light indicates normal operation, while yellow signals AHU failure or BMS fault.
- Improved monitoring efficiency and helped pre-empt equipment failure in sterile zones.

#### 04. Non-PVC Water Bath Sterilization Chamber

- Led installation of a sterilization chamber for non-PVC IV bottles.
- Coordinated with Shinva Group (Chinese pharmaceutical equipment company) for all mechanical and electrical integration.
- Oversaw sterile layout design, integrating utility systems (AHU, PS, PW, IS) and conveyor logistics from filling to inspection.
- Resulted in faster chamber commissioning and higher validation success rates.

#### 05. Track & Trace – Condot System

- Executed full system qualification including Design Qualification (DQ), Installation Qualification (IQ), Operational Qualification (OQ), and Performance Qualification (PQ).
- Ensured regulatory compliance for serialization and traceability in pharmaceutical packaging.

#### 06. Label Alarm System

- Installed an in-line label detection system for packaging lines A and C.
- The system triggers an alarm if a label is misaligned, damaged, or missing.
- Enhanced packaging quality control and reduced labeling errors.

### Academic Projects

- **Solar-Powered Lawn Mower** – Arduino-controlled mover for sustainable lawn maintenance.
- **Intelligent Suspension System** – Adaptive suspension prototype for a vehicle Comfort using Arduino.
- **Electric Formula Car** – Mini electric car design project with Arduino-based control systems.

## APPLICABLE CODES, STANDARDS & ENGINEERING REFERENCES

---

Work performed at Kelun Lifesciences is guided by globally recognized codes and standards for sterile pharmaceutical production and industrial safety.

- **GMP Guidelines (WHO/PIC/S)** – Governs sterile production, validation, and documentation protocols.
- **ISO 9001** – Quality Management System for consistent production standards and process reliability.
- **ISO 45001** – Ensures occupational health and safety through proactive hazard prevention and reliable operations.
- **ISO 14001** – Environmental standards for emissions control, waste management,

and sustainable resource use.

- **ISO14644-1** – Cleanroom classification (ISO Class 7 & 8) for sterile manufacturing and facility maintenance.
- **ISO/IEC17025** – Competency standards for testing/calibration lab performance.
- **IEEE / IECStandards** – Applied in safe electrical design, instrumentation, and control system configurations.

## PERSONAL DETAILS

---

-NIC: 983151272V

-Date of Birth: 10th November 1998

-School: St. Thomas' College, Matale

## REFEREES

---

Dr. Kalum Kathriarachchi (DSc Japan, MSc Japan, BSc SL)  
Senior Lecturer, Head of Department – Engineering & Construction  
International College of Business and Technology  
Tel: +94 760 398 391 | Email: kalum@icbtcampus.edu.lk

R.G. Vimukthi Pathirana (MEng, AIT; BSc. Eng. AIT)  
Consultant / Lecturer, Kandy Innovation Center, NIBM  
Tel: +94 710 340 367 | Email: Vimukthi@nibm.lk