

# Akindu Kalhan

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## Experience

### Dyson Sphere Team

*Smart Energy Integration & Automation Network (SEIAN)*

*Oct 2023 - Present  
Colombo, Sri Lanka*

- Developed control logic to enhance grid stability.
- Researched ML-based fault detection using ANNs.
- Contributed to market research and product development.

## Projects

### Event Planner Assistant & Event Management Platform with Jac

*Jul 2025*

Collaborated as part of Team Nova using Jac programming language and Jaseci framework.

**Solution 1:** Built a CLI Event Planner Assistant for event creation, checklists, and budget suggestions with LLM-powered reasoning.

**Solution 2:** Developed a full-stack Event Management Platform (Next.js + Tailwind frontend, Jac backend) with AI-driven planning support.

### Vision-Based Object Sorting Robot Arm

*Jun 2025*

Automated object detection and manipulation in a 3×3 grid using computer vision. Integrated robotic arm with inverse kinematics, custom color sensors, and ML classification. Implemented LabVIEW-based system integration.

### TripMate

*Jul 2025*

Full-stack trip planning web app (React frontend, Spring Boot backend). Features: budget estimation, destination suggestions, customizable itineraries.

### Advanced Light Intensity Indicator (ALII)

*Nov 2024 – Dec 2024*

Designed smart module using LDR + seven-segment display to monitor intensity (0–7). Added stabilization (30–300s) and average display (300–900s) for consistent readings. Optimized for energy efficiency and solar integration.

### TaskMate

*Sep 2024 – Oct 2024*

AI-driven task manager assigning tasks based on skills and availability. Integrated React frontend, Flask backend, Gemini AI, and Ballerina for real-time updates.

### SEIAN – Smart Energy Integration and Automation Network

*SLIoT Challenge 2023*

IoT-based system to upgrade industrial power setups with Smart VFDs and Power Converters. Enabled real-time monitoring, fault detection, and predictive maintenance. Built with ESP modules, MQTT, and phase-wise sensing for scalable power management.

Built Smart Email Assistant with n8n, Telegram, Gmail API, and Gemini 1.5 Flash. Enabled reading and sending emails directly via Telegram bot. Combined AI and automation to simplify daily communication.

## Education

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### B.sc (Hons) in Electrical Engineering

University of Moratuwa, Sri Lanka

Bachelor's degree program

Feb 2023 - Present

GPA: 3.65/4.00 (As of Semester 3)

Relevant Coursework: Programming Fundamentals (A), Computer Systems (A), Basic Electronics for Engineering Applications (A+), Data Structures & Algorithms (A), Modular Software Development (A)

### School Education

Royal College Colombo

Combined Mathematics, Chemistry, Physics

Jan 2008 - Feb 2022

z-score: (+2.2687)

## Technical skills

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### Programming Languages/Tools

Python, C, C++, Java, MATLAB

### Frameworks/Tools

Spring Boot, Flask

### Software Development

Postman API, Git

### Computer Vision

Open CV, YOLO

## Extra-curricular Activities

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### Department Representative

Department of Electrical Engineering

Representing students and coordinating with faculty.

Jan 2025 - Present

Skills: Communication, Leadership, Conflict Resolution

### Treasurer

Leo Club of University of Moratuwa

Oversee the club's financial operations, including maintaining accurate records, preparing periodic financial reports, and ensuring transparency in fund utilization.

Jun 2025 - Present

Present

Skills: Strategic Budgeting, Financial Reporting, Accountability, Organizational Management

### Assistant Treasurer

Leo Club of University of Moratuwa

Managed club finances and supported budgeting for service projects.

Jun 2024 - Jun 2025

Managed the complete ticketing system and oversaw all income and expenses for the club's largest event (Phoenix 2025), handling a budget close to 4,000,000 LKR.

Skills: Financial Management, Budgeting & Expense Tracking, Organizational Skills

### Co-Director Information Technology

Rotaract Club of University of Moratuwa

Managed digital platforms and supported tech needs for club activities.

Jul 2024 - Jun 2025

Skills: Project Management, Digital Content Management, Technical Support

### Event Coordinator

Gavel Club of University of Moratuwa

Organized and managed club meetings and special events.

Feb 2025 - Present

Skills: Event Planning, Communication, Problem Solving

### Director of Digital Services

Rotaract in RID 3220 - Sri Lanka & Maldives

Led district digital initiatives and platform management.

Jul 2024 - Mar 2025

Skills: Platform Management, Communication

## Project Chairperson

*Tharka - Mahesh Abeywickrama Memorial Debating Competition*  
*Co-partnered with Helakuru Company to lead a four-month debating and oratory competition, managing a budget of 0.5 million LKR with participation from 700+ students across 60+ schools in Sri Lanka.*

Involved in the entire organizing process, collaborating with professionals to enhance the tournament's quality. *Handled finances and documentation while demonstrating strong communication skills in pitching sessions, securing major sponsorships for the event. Skills: Project Management, Strategic Budgeting, Sponsorship Acquisition, Communication, Leadership*

## Honors & Awards

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<b>Champions</b>	FINNC'25
<b>1st Runners-up</b>	SLIoT Challenge 2025 University Category
<b>2nd Runners-up</b>	ComFix Challenge 2025
<b>Finalist</b>	SLIoT Challenge 2023 University Category
<b>Most Outstanding Project Chairperson</b>	Leoistic year 2023-2024
<b>Active Membership Award</b>	Rotaract Club of University of Moratuwa
<b>Spirit of Service</b>	Rotaract Club of University of Moratuwa

## Certifications

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<b>Prompt Design in Vertex AI Skill Badge</b>	Issued Apr 2025 by Google
<b>GenAI 101 with Pieces</b>	Issued Nov 2024 by Pieces for Developers
<b>Artificial Intelligence in Embedded Systems</b>	Issued Oct 2024 by ENTC - UoM
<b>OpenCV Bootcamp</b>	Issued Sep 2024 by OpenCV University

## References

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### Prof. Logeeshan Velmanickam

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### Prof. Buddhika Jayasekara

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