

KAJALUXAN SIVAKUAMRAN

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[Kajaluxan](#)

SUMMARY

Passionate Software Engineer with a strong foundation in coding, testing, debugging, and software development. Skilled in problem-solving and delivering efficient solutions. As a sports enthusiast, I excel in teamwork, coordination, and collaboration, bringing strong communication and leadership abilities to any project. A quick learner, willing to learn new things.

EDUCATION

BSc in Computer Science and Engineering **Jan 2022 - Present**

University of Moratuwa

- CGPA : 3.44 / 4.0

Advance Level **Jan 2019 - Jan 2021**

Jaffna Hindu College

- Z Score : 2.3964
 - Island Rank : 256
 - Combinedmaths : A Physics : A Chemistry: A
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PROJECTS

Airline Reservation Sytem [🔗](#) **Jun 2024 - Oct 2024**

- Collaborated in a team of five to design and develop a real-time airline reservation system with secure user authentication, dynamic seat selection, and live availability updates.
- Led database design and frontend development, ensuring seamless booking management and efficient data handling.
- Optimized user interface performance and integrated intuitive features to enhance overall user experience and responsiveness.
- Technology Stack: Next.js, MySQL, React.js

Dr. Physio – AI Powered Physiotherapist [🔗](#) **Feb 2025**

- Built a real-time exercise feedback system using OpenCV and MediaPipe to detect and correct posture for physiotherapy exercises.
- Developed a RAG-based chatbot with LangChain and OpenAI to handle physiotherapy-related user queries.
- Deployed a user-friendly Flask web app integrating computer vision and NLP for interactive physiotherapy support.
- Technology Stack: OpenCV, MediaPipe, Flask, Python, LangChain, OpenAI

Nano Processor Design in Vivado

May 2024

- Designed and implemented a digital system on FPGA using Vivado, covering simulation, bitstream generation, and resource optimization.
- Managed practical tasks including reset signal allocation and 7-segment display mapping.
- Documented design architecture, testing methodologies, and system behavior in a detailed final report.
- Technology: Vivado

Java-Based Point of Sales (POS) System

May 2024

- Developed a POS application for Super-Saving supermarket using Java with file I/O operations and object serialization.
- Implemented custom exception handling for invalid item codes to ensure robust transaction processing.
- Added support for managing pending bills and applying dynamic discounts for customer purchases.
- Technology Stack: Java

ACHIEVEMENTS

- Runners-Up, DreamHack AI Hackathon 2025
- Finalist, University of Jaffna (UoJ) Coder Competition
- Winner – Best Web Application, Yarl Geek Challenge Junior Season 7 (2018)

VOLUNTEERING

- Secretary, Mora Exams 2024 - Coordinated communication, scheduling, and documentation for national-level mock exams; supported logistics, team collaboration, and stakeholder engagement.
- Organizing Committee Member, Career Fair 2025 – Department of Computer Science & Engineering, UoM

TECHNOLOGIES

- Programming Languages: Python, JavaScript, C++, Java
- Frameworks: Node.js, Flask
- Databases: MySQL
- Hardware & Embedded Systems: Arduino
- Tools & Others: REST, Git, GitHub, HTML, CSS