

SENUTH ABEYWARDANA

Delgoda, Gampaha

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Summary

Computer Science and Engineering undergraduate specializing in software engineering, full-stack development, and DevOps, with hands-on experience in building scalable applications, backend services, and modern deployment workflows. Proficient in Java and object-oriented software design, with additional skills in frontend development, system design, and cloud technologies. Experienced in artificial intelligence, machine learning, and computer vision. Passionate about developing reliable, high-quality software solutions by combining modern technologies, engineering principles, and continuous learning.

Education

University of Moratuwa

B.Sc. Engineering (Hons) in Computer Science and Engineering (CGPA-3.72)

Moratuwa, Sri Lanka

March 2024 – Present

Bandaranayake College

G.C.E A/L Examination Physical Science Stream (Result: AAA, Island Rank: 168)

Gampaha, Sri Lanka

Jan. 2023

Projects

SnapStockAI | *React, TypeScript, Node.js, Python, Computer Vision, Deep Learning, OpenCV*

2026 – Ongoing

- Developing an AI-powered inventory and freshness monitoring system for small-scale retailers, integrating client, server, and AI-service components.
- Implementing computer vision workflows for shelf scanning, product detection, and automated inventory monitoring through the AI service.
- Integrating product detection and freshness analysis capabilities to reduce manual stock monitoring and support more accurate inventory management.

AI-Powered Resume Screening Platform | *FastAPI, Next.js, PostgreSQL, Docker, Ollama*

2026 – Ongoing

- Developing an AI-powered resume screening platform for automated resume analysis, with candidate evaluation, ranking, and job-matching capabilities under development.
- Implemented resume upload and PDF/DOCX text extraction pipelines and integrated a local Ollama-based LLM for structured resume parsing.
- Built separate frontend, backend, and AI-service components using Next.js, FastAPI, and Docker-oriented development workflows.
- Continuing development of candidate scoring, ranking, and job-matching functionality to extend the current resume-processing pipeline.

Movie Ticket Reservation System | *Java, Swing, OOP, Multithreading, Synchronization, Serialization*

2025

- Developed a Java desktop movie reservation system with an interactive Swing GUI for movie selection, show scheduling, visual seat selection, booking management, and ticket generation.
- Implemented object-oriented design using models, services, storage, and GUI layers, incorporating collections, file handling, serialization, and exception handling for persistent booking management.
- Applied Java concurrency techniques using SwingWorker and synchronized booking operations to perform background tasks while protecting shared seat data and preventing concurrent double bookings.

Flood Management and Early Warning System | *ESP32, Arduino/C++, MQTT, IoT, Sensors, FastAPI*

2026

- Contributed to the development of an IoT-enabled flood monitoring and early warning system, focusing on the design and implementation of the sensor-based IoT subsystem.
- Developed ESP32-based sensor integration for monitoring environmental conditions and transmitting real-time measurements to the system through Wi-Fi and MQTT communication.
- Collaborated with frontend and backend team members using Agile development and Git-based workflows, strengthening practical understanding of software engineering, system integration, version control, and team-based development.

KandyPack Order Tracking System | *React, Node+Express, MySQL, Web Development*

2025

- Developed a railway-based parcel tracking system that enables customers to monitor package delivery throughout the transportation process.

- Implemented order management, shipment tracking, and status update functionalities using a client-server architecture.
- Collaborated within a team using Git and GitHub to manage source code, feature development, and project integration.

Technical Skills

Programming Languages: Python, Java, C, C++, JavaScript, TypeScript, SQL, HTML5, CSS3

Frontend Development: React.js, Next.js, Tailwind CSS, Responsive Web Design

Backend Development: FastAPI, REST APIs, Node.js, Express.js

AI & Machine Learning: Large Language Models (LLMs), Prompt Engineering, TensorFlow, Computer Vision

Databases: PostgreSQL, MySQL

DevOps & Cloud: Docker, GitHub Actions, CI/CD

Developer Tools: Git, GitHub, VS Code, Postman, Arduino IDE

Hardware & Embedded Systems: Arduino, Raspberry Pi, Sensor Integration, Hardware Debugging

Certifications & Achievements

Information & Technology Diploma

ICBT Campus

Gampaha, Sri Lanka

2023

- Completed a Diploma in Information & Technology covering programming fundamentals, networking, databases, and software applications.

Python for Beginners

University of Moratuwa – Centre for Open & Distance Learning (CODL)

Sri Lanka

2026

- Participated in the **Python for Beginners** online learning programme conducted by the Department of Computer Science & Engineering, Faculty of Engineering, University of Moratuwa.

AWS Academy Graduate – Microservices and CI/CD Pipeline Builder

AWS Academy

2026

- Completed the **AWS Academy Microservices and CI/CD Pipeline Builder** training programme, covering microservices architecture, continuous integration, continuous delivery, and automated deployment pipelines.
- Completed **12 hours** of AWS Academy training and earned the associated digital training badge.

Competitive Programming & Hackathons | University-Level Competitions

- Participated in **UoJ Coders**, solving algorithmic and programming challenges in a competitive environment.
- Competed in **MoraXtreme 10.0**, a university-level overnight coding competition focused on problem solving and teamwork.
- Participated in **CodeRally**, gaining experience in collaborative software development and rapid solution design.

Robotics Competitions | University Competitions

- **SLRC 2025** – Finalist in the Sri Lanka Robotics Challenge in 2025.
- **SLRC 2026** – Finalist in the Sri Lanka Robotics Challenge in 2026.
- **MicroMaze 2.0** – Achieved a **Top 10** finish in an autonomous robotics competition.

Volunteering Experience

- **Organizing Committee Member**, IESL RoboGames 2025/26, University of Moratuwa
- **Organizing Committee Member**, SLIoT Challenge 2026, University of Moratuwa
- **Company Coordinator**, CSE Careers Day 2026, University of Moratuwa
- **Organizing Committee Member**, Hit the Ground 2026, University of Moratuwa
- **Web Team Member** - Mora Lenz, Mass Media Club of University of Moratuwa | 25/26 Term

References

Mr. Hasitha Aravinda Thilakarathna

Software Architect - Ballerinalang

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