Colombo 9, Sri Lanka • linukalolitha2002@gmail.com • +94 70 404 4964 • Linuka Lolitha LinkedIn • Linuka Lolitha GitHub

PROFILE

Highly motivated and technically skilled final-year undergraduate specializing in Information Technology, with hands-on experience in Software Quality Assurance, manual testing, and Cypress-based automation. Proven ability to deliver client-oriented web applications using MERN and Spring Boot stacks. Strong understanding of Agile workflows, cloud deployment (AWS), and UI/UX practices.

PROFESSIONAL EXPERIENCE

CEEE Technologies

Full Stack Developer Intern

Dec 2023 - May 2024

- 1. Developed Customer Relationship Management(CRM) using MERN, contributing to both front-end and back-end features.
- 2. Designed responsive user interfaces using Figma, ensuring mobile-first layouts and improving user flow by 25% through iterative design feedback.
- 3. Conducted 50+ manual testing covering functional, UI, and regression scenarios across all modules.
- 4. Logged and tracked bugs, collaborated with developers on defect resolution, and maintained high test coverage.
- 5. Participated in 8+ Agile sprint cycles, contributing to sprint planning, daily stand-ups, and retrospectives to support iterative development and QA validation.

KEY PROJECTS

Final Year Research Project

Sri Lanka Institute of Information Technology

June 2024 – June 2025

Project Title: Interactive Sinhala Grammar Learning Platform For Primary School Children

- 1. Developed a web-based Sinhala grammar learning system capable of detecting and correcting grammatical errors using 4 specialized machine learning models, including rule-based and rawm-models approaches.
- 2. Created and labeled 3 domain-specific Sinhala datasets (400+ entries each) for training, testing, and validating the models to improve grammatical accuracy and coverage.
- 3. Designed and implemented 9 interactive grammar games in React, structured across 3 key grammar rules, to provide users with practice-based reinforcement and assessment.
- 4. Integrated custom NLP logic to analyze sentence structure and generate real-time grammar feedback, error explanations, and guided corrections.
- 5. Gamified the learning experience with visual cues, hints, audio responses, and scoring mechanisms to maintain engagement and enhance memory retention.
- 6. Achieved 85% model accuracy on bench-marked test data and observed a significant improvement (30%+) in user performance during pilot evaluations.
- 7. The platform is being positioned as a digital tool for schools and individual learners, and a research paper is under review for presentation at an academic conference.

Tools & Technologies: MERN Stack , Python , ML, Custom NLP Models, Postman

Online Clothing Website

Solo Client Project

- 1. Developed and delivered a complete e-commerce web application featuring admin and customer modules, supporting product management, order processing, and user authentication.
- 2. Implemented shopping cart functionality, order placement flow, online payment and secure login/register system.
- 3. Created RESTful APIs for product listing, stock updates, and user management, connected to a MongoDB database.
- 4. Deployed the full stack application to AWS EC2, making it accessible online with a production-ready environment.
- 5. Handled 100% of development, testing, and deployment, completing a real-world client project with fully functional features and a responsive UI.
- Tools & Technologies: MERN Stack, MongoDB, AWS, Postman

Fitness Tracking Web App

Group Project - 3rd Year | Sri Lanka Institute of Information Technology

1. Developed back-end APIs using Spring Boot for Post activity types, and user data management with full CRUD support.

2. Integrated MongoDB to store structured workout data for multiple users with flexible schema design.

3. Tested and validated key user journeys (log workout, view history, delete entries), contributing to overall app stability.

Tools & Technologies: Spring Boot, React, MongoDB, Postman

Movie Booking System

Solo Project

- 1. Developed back-end APIs using Spring Boot for seat booking using threads and developed full CRUD for seat booking .
- 2. develop front-end UI's using react and responsive for mobile and desktop devices
- 3. Integrated MySql to store structured seat booking data for multiple users with flexible schema design.
- 4. Tested and validated key user journeys

Tools & Technologies: Spring Boot, React, MongoDB, Postman

QA Project – Web Testing with Cypress

Final Year Test Project | Sri Lanka Institute of Information Technology

- 1. Executed comprehensive end-to-end testing on a full-stack web application using Cypress, focusing on UI consistency, functional flows, and edge cases.
- 2. Authored 40+ test cases covering user authentication, form validation, data rendering, and navigation logic.
- 3. Automated repetitive test scenarios using Cypress scripts, resulting in a 50% reduction in manual testing time.
- 4. Identified and reported 25+ functional/UI bugs using a structured defect log, improving overall product stability.

5. Collaborated with developers to validate bug fixes and ensure test coverage across all major user journeys.

Tools & Technologies: Cypressn Tool

English-Sinhala Translator App

Group Project | Sri Lanka Institute of Information Technology

- 1. Built a web app that translates between English and Sinhala using the Google Translate API.
- 2. Added voice input so users can speak and get real-time translations and Singlish key board to type sinhala without using a sinhala font.
- 3. Created a responsive UI with React that works well on both desktop and mobile.
- 4. Helped design user-friendly input/output features for easy switching between voice and text.
- 5. Tested with over 100 phrases to ensure accuracy and smooth performance.

Tools & Technologies: MERN Stack , Google Translate API , Voice Recognition, Postman

SKILLS

Languages: JavaScript, Python, C, C++, HTML, CSS, SQL Frameworks & Libraries: React, Node.js, Express.js, Spring Boot, Bootstrap, Tailwind CSS Databases: MongoDB, MySQL, Firebase Tools: Git, GitHub, Postman, Figma, Cypress Cloud & Deployment: AWS Testing: Manual Testing with Postman , Automation with Cypress Other: Agile/Scrum NLP, Game Design

EDUCATION

BSc (Hons) in Information Technology Specialising in Information Technology (SLIIT) G.C.E Advanced Level-Rahula College, Matara Science for Technology (B) Engineering for Technology (C) ICT (C)

CERTIFICATIONS

- 1. Introduction to JavaScript SoloLearn.
- $2. Introduction \ to \ Python-SoloLearn.$
- $\label{eq:constraint} 3. Introduction to \ MongoDB MongoDB \ University.$
- 4. AWS Academy Graduate AWS Academy Cloud Foundations(2024)

Amazon Web Services Training and Certification.

2021 - present 2018 - 2020