

Kushan Sankalpa

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Personal Portfolio — No 20/1, Templer Road, De Zoysa Place, Mount Lavinia, Sri Lanka

About me

I am a proactive Software Engineering undergraduate with a robust foundation in full-stack development and object-oriented programming. With hands-on experience in designing scalable and efficient software solutions, I excel in analytical thinking and problem solving. I thrive in collaborative environments and am dedicated to continuous learning, ready to leverage my technical expertise and innovative mindset to contribute to impactful technology projects.

Skills

Technical Skills: Object-Oriented Programming, Full-Stack Web Development, Database Management, API Design & Integration

Programming Languages: Java, Python, Html, Css, JavaScript, PHP, SQL, MySQL

Frameworks Spring Boot, Node.js, React, Angular, Flutter

Tools: IntelliJ IDEA, VS Code, Figma, Git, Github, Postman, Word, Excel, PowerPoint, Click-up

Communication Skills: English (*Professional Proficiency*), Sinhala (*Native Proficiency*)

Education


UNIVERSITY OF WESTMINSTER 2024 - Present
Undergraduate BEng (Hons) Software Engineering

First Year Modules	Second Year Modules (Grades: Pending)
<ul style="list-style-type: none">– Trends in Computer Science (76)– Computer Systems Fundamentals (91)– Software Development I - Python (82)– Web Design and Development (86)– Mathematics for Computing (81)– Software Development II - java (83)	<ul style="list-style-type: none">– Object Oriented Programming (78.5)– Database Systems (85.5)– Software Development Group Project– Server-Side Web Development– Algorithms: Theory, Design and Implementation– Software Engineering Principles and Practice (76)


INFORMATICS INSTITUTE OF TECHNOLOGY May 2023 – Dec 2023
Foundation Certificate in Higher Education (Distinction)

Sri Bodhiraja College, Embilipitiya 2008 – 2019

Projects

Group Project | Wali Pilla Sinhala Learning App (Flutter | Node.js | MongoDB | Firebase)  **March 2025**

- Developed a gamified app for Sinhala learning, designed for children (upper preschool to Grade 5) including the diaspora.
- Offered interactive exercises to improve grammar, spelling, writing, and pronunciation.
- Built with **Flutter** to deliver intuitive lessons and engaging vocabulary drills.
- Leveraged a robust backend using **Node.js** and **MongoDB** with **Firebase** for real-time analytics and secure authentication.
- Combined modern technology with innovative teaching strategies to enhance language proficiency.

Task Hut: Task Manager Application (Angular | Spring Boot | MySQL)  **Apr 2025**

- Developed a full-stack task management application using **Angular** for the frontend and **Spring Boot** for the backend.
- Implemented secure user registration and login with **JWT authentication** for robust session management, alongside full CRUD operations on tasks.
- Integrated **MySQL** for data persistence and designed a responsive, modern UI.
- Designed a dashboard that groups tasks by status (To Do, In Progress, Done) and offers detailed task views.

- Developed a real-time conversational agent using **Python**, **OpenAI’s gpt-3.5-turbo**, and **Gradio**.
- Maintains a dynamic conversation history to generate context-aware responses using OpenAI’s ChatCompletion API.
- Integrated a web interface with **Gradio** for seamless, interactive user experience.
- Implemented robust error handling to manage API call issues, demonstrating proficiency in API integration and NLP.

- Developed an AI-powered text correction tool using a pre-trained **T5 model** for grammar and spelling corrections.
- Built an interactive web interface with **Gradio** to enable users to input text and view corrected output in real-time.
- Integrated **Hugging Face Transformers** to leverage state-of-the-art natural language processing capabilities.

- Developed a **real-time event ticketing system** utilizing a multithreaded producer-consumer pattern for dynamic ticket allocation and retrieval.
- Implemented a responsive frontend with **React** and a robust **Spring Boot** backend integrated with **H2 Database** for efficient, lightweight data management.
- Ensured effective synchronization, configuration persistence, and scalability to support high-volume ticket transactions.

Other projects

- Walipilla Markerting Webpage 
 - Student Management System : 
 - Multi Functional Calculator 
- Feb 2025

May 2024

Dec 2023

Certifications

- Generative AI in Learning and Development
 - Python for Beginners (University of Moratuwa)
 - Java Object-Oriented Programming
 - Learning Spring with Spring Boot
 - Angular Essential Training
 - React.js Essential Training
- Certificate:  Feb 2024

Certificate:  Feb 2024

Certificate:  Nov 2024

Certificate:  Nov 2024

Certificate:  Nov 2024

Certificate:  Nov 2024

Achievements

- Ranked **10th in Sri Lanka** and **170th globally** in the **IEEEExtreme 18.0 Competition**
 - Reached the finals (Top 20) in **Benchmark 3.0** organized by **AIESEC in SLIIT** as part of **Goose 4.0**
 - Participated in the **international hackathon** organized by the University of Westminster
 - Participated in **Haxpedition: Mini Hackathon** organized by the **IEEE student branch of IIT**
- 2024

2024

2024

2024

Extra-curriculars

Informatics Institute of Technology

- Member of the **IEEE Community** at **IIT**
- 2024 - Present

Sri Bodhiraja College

- prefect
 - Member of Maths and Science Society
- 2017

2017

References