Hasitha Saubhagya

Software Engineer

https://hasithasaubhagya.com

Profile

Passionate and innovative Software Engineer with diverse experience in full-stack development, mobile application design, and scalable web solutions. Skilled in delivering 50+ successful freelance projects and contributing to industry-grade systems during an internship at hSenid Business Solutions. Proficient in modern frameworks such as Vue.js, React, .NET, and Flutter, with a strong foundation in database management, UI/UX design, and performance optimization. A proactive learner and collaborative team player, dedicated to solving complex problems, exploring new technologies, and creating impactful, user-focused applications. Seeking opportunities that encourage innovation, continuous learning, and the application of my technical expertise to deliver high-quality solutions.

Work Experience

Software Engineer Intern – hSenid Business Solutions - Colombo, Sri Lanka.

Jan 2024 - July 2024

- Designed and developed a Donation Management System with a .NET Core Web API backend and a Vue.js frontend.
- Implemented multiple RESTful API controllers for handling donations, events, expenses, users, roles, and transactions.
- Created robust data access layers using Entity Framework Core, including custom query processors and context management.
- Developed and maintained database schema migrations to support evolving business requirements.
- Built secure authentication and authorization mechanisms, including role-based access control for different user types (facilitator, guardian, receiver, admin).
- Engineered modular and reusable Vue.js components for dashboards, forms, navigation, and notifications.
- Integrated Axios for API communication and Vuex for state management in the frontend.
- Documented API endpoints, data models, and project setup for team collaboration and future maintenance.

Freelance Software Engineer.

2022 - 2025

• Developed and delivered 50+ projects, including Flutter Android mobile apps, web applications, and Windows applications for various clients.

Education

B.Sc. (Hons) Information Technology, University of Moratuwa Faculty of Information Technology, Sri Lanka.

2021 – 2025 July

Advance Level Examination Physical Science Stream, Bandaranayaka College Gampaha.

2015-2019

Chemistry: A, Physics: B, Combined Math: B

District Rank: 90

• Certifications

- Foundation of Cybersecurity (Google Cybersecurity Professional Certificate) Coursera
- Manage Security Risks (Google Cybersecurity Professional Certificate) Coursera
- Ethical Hacking From A-Z: Beginner to Expert Course Udemy

- Complete Android Developer Course Udemy
- Full Stack Web Development Master Course Udemy
- Python for Deep Learning Udemy
- Hacktitude 2022 Coding Competition 99X

Projects - https://github.com/HasithaSawbhagy

• Context-Aware Social Media Engagement Prediction: Python 3.11, pandas, numpy, scikit-learn, TensorFlow, Keras, scikeras.

Developed a machine learning pipeline to predict Instagram engagement using advanced feature engineering and model comparison (Random Forest, XGBoost, Neural Networks, and Ensemble methods). Automated data processing, hyperparameter tuning, and explainable AI analysis to deliver actionable insights for optimal content posting strategies

Network Intrusion Detection Framework: Python 3.9, Pandas, NumPy, Scikit-learn, PyYAML, Matplotlib.

This project presents a modular machine learning framework to network intrusion detection, designed for flexibility, adaptability, and real-time performance. It leverages various machine learning techniques to classify network traffic as either benign or malicious, addressing various types of network attacks. The framework is designed to be a reusable tool for research and practical applications by being easily extensible and configurable.

• School Management System: ReactJS, Node.js, Mango DB, Express.js, Bootstrap.

This project is designed to efficiently manage school operations, including classes, students, results, teachers, and reporting. It features a robust student result management system, automated report generation, and a built-in notification system.

· Accounting Software: Java, NetBeans, GitHub.

A software system that maintains account books on computers, including recording transactions and account balances. This system reduces the drawbacks of existing solutions and provides user-friendly user interfaces.

Advertising Platform for Unity Games: React JS, SCSS, Node.js, GitHub, Trello, Figma, Firebase.

A web application where customers can upload advertisements to display in Unity games. Ad uploading, manipulating, ranking, payment handling, and user account handling are the main features provided by the web application. I was responsible for developing the admin interface for this industry-based project, mentored by Voazis.

Migraine Pre-Alert Warning System: C, C++, Assembly, Ateml Studio, Proteus, KiCad.

A system to identify the weather conditions that cause migraine and control those weather conditions. Also, this system gives warnings to the user if weather conditions are cause for migraine.

• Anonymous Emailing Service: PHP, HTML, CSS, MySQL.

A web application that allows users to send emails anonymously. Including features for sending emails, admin login, admin dashboard.

• Bus Booking Web Application: Springboot, MSSQL, ReactJS.

A Train Booking Web Application using Springboot, MSSQL, and ReactJS, allowing users to search, book, and manage train tickets while providing admins with full control over train schedules, user management, and booking monitoring.

• Task Scheduling App: Flutter, Firebase, Google Maps, Weather API.

Developed a Task Scheduling Reminder App using Flutter, Google Maps API, and Weather API, enabling users to schedule meetings or tasks with or without a location. The app provides smart reminders, weather alerts for outdoor activities, and the fastest route suggestions for events at different locations.

• IoT-Based Weather Station with Real-time Mobile Monitoring: C++, Arduino Mega, ESP32 DevKit V1, Firebase, Flutter Designed and built a complete IoT system to capture, store, and display real-time environmental data. Integrated an Arduino Mega with multiple sensors to collect data, which was processed and sent to an ESP32 for Wi-Fi communication. Leveraged Google's Firebase for cloud data storage and developed a cross-platform mobile application using Flutter to provide a user-friendly interface for remote monitoring.

· AI-Powered Gemini Chrome Extension: HTML, CSS, JavaScript, Google Gemini API

Developed a browser extension for Google Chrome that seamlessly integrates Google's Gemini AI directly into the user's workflow. This extension allows users to send selected text from any webpage to the Gemini API for processing and receive instant responses within the same tab. The project involved creating a user-friendly interface, managing API key security, and handling asynchronous communication between the browser, a content script, and the background service worker. This tool boosts productivity by providing AI-powered assistance without needing to switch contexts.

Coffee Shop Management System (Desktop Application): C#, MSSQL

A desktop-based management system built for coffee shop operations. Features include product inventory control, order processing, customer management, and real-time reporting. Implemented using C# with a SQL Server backend—delivered via a Visual Studio solution with accompanying database scripts.

Extra-curricular and Volunteer Activities

- Chairperson of the NExus Phase 1, University of Moratuwa.
- Member and Software Engineer of DevLabs, University of Moratuwa.
- Coordinator for Mora Heads Up, University of Moratuwa.
- Coordinator for Are You Ready? University of Moratuwa.

Technical Skills

- Programming Languages: Java, Python, C, C#, C++, PHP, Dart, JavaScript, TypeScript.
- Backend Development & Frameworks: Spring Boot, Node.js, .NET Framework, Django.
- Frontend Development & Libraries: React JS, Vue JS, HTML5, SCSS, Bootstrap, Tailwind CSS, 3D/WebGL.
- Mobile Development: Flutter, Dart, Java.
- Databases & Cloud: MySQL, MS SQL, MongoDB, Firebase.
- DevOps, Containerization & CI/CD Tools: Docker, Kubernetes, Jenkins, GitHub Actions.
- Developer Tools & Version Control: Git, GitHub, VS Code, Visual Studio, Android Studio.
- Testing, Automation & BDD Tools: Selenium, Allure, Gherkin.
- Al, Machine Learning & Computer Vision Libraries: TensorFlow, PyTorch, Keras, Scikit-learn, OpenCV, Hugging Face Transformers, NLTK, spaCy, CatBoost.
- Design & Collaboration Tools: Figma.

Languages

- · English Fluent
- Sinhala Fluent

References

• Available upon request