

Wasaba Eranga Madapathage Don

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Software Engineer & AI Enthusiast with 6+ years of experience building AI-driven, full-stack web and mobile applications (MERN, Flutter, React Native) and hands-on expertise in Machine Learning and Deep Learning. Published IEEE researcher with an MSc in Data Science & Artificial Intelligence from Edge Hill University and a First-Class BSc (Hons) in Computer Science (Software Engineering) from the University of Wolverhampton.

Skilled in delivering scalable, high-performance solutions, leading development teams, and integrating intelligent systems. Passionate about AI-native development, LLMs, Generative AI, and Agentic automation, combining practical engineering expertise with applied deep learning to build next-generation intelligent systems.

Work experience

Software Engineer (Senior) – Efito Solutions (Pvt) Ltd, Sri Lanka

Aug 2023 – Sep 2024

- Led development of Zulu Courier web app and Fan Budget admin dashboard (MERN stack), streamlining delivery workflows and improving operational efficiency by 30%.
- Built Compatible1 and Fan Budget mobile apps (Flutter, Node.js) integrating Socket.io & ZegoCloud for real-time communication and AI-enhanced call management.
- Developed and integrated scalable REST APIs (Node.js/Express.js), reducing average response times to <200ms while supporting 10K+ users.
- Mentored and trained 5+ junior developers, improving team productivity and code quality (20% fewer defects).
- Applied agile practices to accelerate release cycles and maintain high-quality deliverables.
- Implemented AI-assisted coding workflows using Copilot and OpenAI APIs.

Software Engineer – Freelance (Remote)

Feb 2022 – May 2024

- Delivered full-stack AI-enabled apps for international clients using React, Node.js, and Python.
- Acted as lead developer on HungerLink (Toronto, Canada) – built a React.js + Redux back-office web app; improved data processing and API integrations, boosting system performance by 40%.
- Developed and deployed Arya Ayurveda & Arya Taprobane Travel apps (React.js, Node.js, AWS), increasing client bookings and customer engagement.
- Built WESL Online Ticket Booking app (Flutter) with secure payment integration, enabling seamless user transactions.
- Ensured high-quality code, scalable architectures, and reliable deployments across all projects.

Software Engineer & Technical Support Engineer – LAYOUTindex, Sri Lanka

May 2021 – Jun 2023

- Engineered and maintained applications in React Native, React.js, Node.js, and PHP across key projects: Dogota, Syscolabs Web, OnlineAccounting, EventsX, CineSync.
- Delivered enterprise-level technical support to clients, diagnosing and resolving complex infra/software issues, ensuring 99% system uptime.
- Authored technical documentation and troubleshooting guides, reducing support resolution time by 25%.
- Balanced dual responsibilities as developer and support engineer, managing multiple priorities under tight deadlines.
- Collaborated with cross-functional teams to design scalable, secure, and user-centric solutions.

Associate Software Engineer – EMP (Pvt) Ltd, Sri Lanka

Feb 2018 – Mar 2021

- Supported ERP management and customization (SAP + MS SQL Server), improving workflow efficiency by 15%.
- Partnered with business teams to optimize ERP processes, reducing transaction errors and increasing system reliability.
- Administered critical IT infrastructure (Domain Server, Active Directory, DHCP, file/email servers, backups), ensuring secure and stable operations.
- Provided day-to-day IT support to staff, resolving networking/software issues and minimizing downtime.
- Authored technical documentation to support ERP development and IT operations.

Intern IT – IUCN Sri Lanka

Aug 2017 – Jan 2018

- Delivered IT help desk support via phone and remote software, achieving high user satisfaction.
- Resolved PC and software issues, ensuring smooth IT operations across the office.
- Assisted in maintaining Windows-based servers, contributing to system stability and performance.
- Gained hands-on experience in IT support, troubleshooting, and system maintenance.

Education

- **MSc. Data Science & Artificial Intelligence** - Edge Hill University, Lancashire (2024 -2025)
- **BSc (Hons) Computer Science (Software Engineering)** – University of Wolverhampton – First Class (2022 -2023)
- **Higher National Diploma in Computing (Software Engineering)** – Pearson BTEC (2018 -2020)

Core Skills

- **Frontend:** React.js, React Native, Flutter, Redux, Redux Toolkit, HTML, CSS, Tailwind CSS, Bootstrap, Material UI
- **Backend:** Node.js, Express.js, Python (Flask, FastAPI), PHP
- **Databases:** MongoDB, MySQL, SQL, Firebase

Programming Languages

- JavaScript, TypeScript, Python, Dart, PHP

Databases

- SQL, MySQL, NoSQL, MongoDB, PostgreSQL, Firebase, SQLite

AI & Data

- **Core Concepts:** Machine Learning, Deep Learning, Natural Language Processing (NLP), Computer Vision, Data Preprocessing, Model Evaluation, Feature Engineering
- **Frameworks & Libraries:** TensorFlow, PyTorch, Scikit-learn, LangChain, Hugging Face Transformers
- **Generative & Agentic AI:** Generative AI, Large Language Models (LLMs), Agentic AI Systems, Prompt Engineering, AI Workflow Automation, Agent- Oriented Architecture
- **Models & Local LLMs:** Ollama-based LLMs (LLaMA, GPT-OSS, Mistral, Phi), OpenAI GPT models, Claude (Sonnet), Custom model fine-tuning & evaluation
- **APIs & Tools:** OpenAI APIs, Ollama, Hugging Face Hub, GitHub Copilot, Model Deployment & Inference optimization

Tools & Cloud

- Git, GitHub, GitLab, Bitbucket, Docker, AWS, Firebase, Stripe, PayPal, Socket.io, REST API integrations

Additional

- Technical Support, ERP (SAP), Computer Hardware & Networking

Projects

- **InstaLeaf: AI-Powered Plant Disease Classification Using Deep Learning** (*Flutter, Python, ML/DL, TensorFlow, Node.js, MongoDB*)
 - Built a deep learning-powered app to classify crop diseases with 92% accuracy.
 - Integrated Node.js API backend for real-time detection, improving usability for farmers.
- **Zulu Courier Web Application** (*React.js, Node.js, Express.js, MongoDB, Socket.io, Stripe*)
 - Developed an AI-supported delivery management system with dynamic route predictions, Real time tracking and intelligent notification logic.
 - Improved delivery workflows, boosting efficiency by 30%.
- **Smart Health App for Brain Tumor Detection** (*Flutter, Firebase, ML/Image Processing*)
 - Developed an AI medical app for MRI scan analysis using CNNs, achieving strong clinical accuracy.
 - Research published in IEEE Xplore (2023), proving technical and healthcare impact.
- **HungerLink Backoffice (Canada, Remote)** (*React.js, Redux, Tailwind CSS, MaterialUI*)
 - Built an admin dashboard for food logistics.
 - Optimized API integrations, improving system performance by 40%.
- **Compatible1 & Fan Budget Mobile Apps** (*Flutter, Node.js, MongoDB, Socket.io, ZegoCloud, PayPal*)
 - Mobile apps with real-time communication & payments, improving user retention.
- **Arya Ayurveda & Taprobane Travel Platforms** (*React.js, Next.js, Node.js, AWS*)
 - Developed responsive web platforms, increasing online bookings & engagement.
- **CineSync Mobile App** (*React Native, Redux*)
 - Built a cross-platform movie app with Redux state management, improving user experience and app stability.
- **Fakenhamcinema.co.uk** (*React.js, HTML, CSS, WebFlow*)
 - Developed and launched the official cinema website with responsive UI, enhancing ticket booking visibility and customer engagement.
- **EventsX Web App** (*React.js – Frontend, Technical Support*)
 - Contributed to the frontend and provided client support & troubleshooting, ensuring smooth event management operations.
- **Onlineaccounting.lk** (*PHP CodeIgniter, HTML, CSS, Support*)
 - Delivered technical support and feature updates for an online accounting platform, increasing system reliability for users.
- **Salon Management System** (*Bootstrap, PHP, MySQL, Chatbot Integration*)
 - Developed a salon booking system with chatbot support, streamlining customer appointments and inquiries.

Achievements

- Research paper publication in IEEE Xplore "Smart Health App for Identifying Brain Tumors" | 2023 IEEE 8th International Conference for Convergence in Technology (I2CT) Available at: [Link to the paper](#)