Usama Puward

Colombo, Sri Lanka | usamafuward2001@gmail.com | 076 626 0507 | Portfolio Website

in usama-puward | Usamafuward

Profile

AI/SE Engineer Intern and Software Developer with a Computer Science background, experience in Software Engineering and Artificial Intelligence. Dedicated to developing innovative, scalable solutions, tackling complex challenges, and driving real-world impact through collaboration and continuous learning.
[Explore more of my works] .

Education

BSc in Computer Science, University of Colombo   May 2022 – Aug 2025
- **Coursework:** Software Engineering, Data Structure and Algorithms, Machine Learning and Neural Computing, Middleware Architecture, SQA, DBMS

Professional Experience

AI/SE Engineer Intern, Kainovation Technologies – Colombo, Sri Lanka   Nov 2024 – Present
- Designed and implemented the **Support AI Assistant**, a full-stack conversational AI with chat and voice support, using **Next.js** (frontend) and **FastAPI** (backend) integrated with **OpenAI Realtime API, Gemini, and vector stores**, delivering real-time, context-aware support for customers and employees
- Built an **Intelligent Document OCR Solution** with **FastHTML** (frontend) and **FastAPI** (backend), integrating **Gemini and OpenAI OCR models** to extract data from handwritten and printed documents with high accuracy
- Developed **Voice AI solutions** (AI Recruitment Assistant, AI Insurance Agent, AI Receptionist) with **Next.js** (frontend) and **FastAPI + Hume AI** (backend), enabling automated interviews, policy explanation, and real-time voice-enabled scheduling with calendar sync
- Created the **SAP Invoice Automation** frontend in **FastHTML**, streamlining invoice upload and formatting for SAP-ready outputs, improving accuracy and reducing manual data entry
- Developed the **InsurePulse landing website** using **React and Next.js**, delivering a responsive, SEO-optimized showcase for the platform's reporting and analytics features
- Independently developed the **official Kainovation Technologies website** in **Next.js**, achieving optimized performance, SEO visibility, and a fully responsive user experience

Contract Software Developer, Edus Lanka (PVT) LTD – Jaffna, Sri Lanka   Nov 2024 – Jan 2025
- Contributed to the development of **Mediman – Doctor Patient Clinic Online Appointment System**, a **full-stack MERN project**
- Built the frontend using **React and Next.js**, delivering a responsive and user-friendly interface for appointment booking, patient management, and real-time doctor-patient communication
- Implemented **payment gateway integration** for secure online transactions, ensuring smooth and reliable payment flows
- Developed the **admin dashboard** for doctors and staff, enabling efficient management of appointments, patients, and system configurations

Projects

Eats Robers – Food Ordering Web App   github.com/Usamafuward
- Designed and developed a full-stack web application for discovering meals, placing orders, and managing payments
- Implemented RESTful APIs and MongoDB integration for seamless user experience
- Tools Used: React, Node.js, Express.js, MongoDB, Mongoose

Travel Point – Social Travel Platform   github.com/Usamafuward ☑

- Built a social platform for travelers to share itineraries, experiences, and book accommodations
- Integrated FastAPI backend with React Native frontend for seamless web and mobile experience
- Implemented authentication, PostgreSQL database, and responsive UI using Tailwind CSS
- Tools Used: React, React Native, Node.js, FastAPI, PostgreSQL, Tailwind CSS

Mediman – Doctor Dashboard   github.com/Usamafuward ☑

- Designed a responsive doctor dashboard to manage appointments, patient records, and prescriptions.
- Implemented modern UI components using Shadcn-UI and Tailwind CSS for better user experience.
- Tools Used: React, Shadcn-UI, Tailwind CSS

Technologies

Languages: Python, JavaScript, TypeScript, C++, SQL

AI/ML: TensorFlow, OpenAI API, Gemini, Hume AI, Pandas, NumPy, OpenCV, LangChain, Vector Databases

Frontend: React, Next.js, React Native, FastHTML, HTML/CSS, Tailwind CSS

Backend: FastAPI, Node.js, Express, Django, MongoDB, PostgreSQL

Cloud & DevOps: Microsoft Azure, Git, Docker, RESTful APIs

Certifications

Meta React Specialization ☑	Meta
Machine Learning Specialization ☑	DeepLearning.AI & Stanford
Introduction to Front-End Development ☑, **Introduction to Mobile Development** ☑	Meta
Introduction to TensorFlow ☑, **CNNs in TensorFlow** ☑	DeepLearning.AI
Artificial Intelligence on Microsoft Azure ☑	Microsoft
Azure Fundamentals Training ☑	Styava
Developing Back-End Apps with Node.js and Express ☑	IBM
Mastering Multi-Agent Development with AutoGen ☑	Packt
DevOps Essentials and Version Control with Git ☑	Edureka
30 Days MasterClass in Artificial Intelligence ☑	NoviTech R&D
Programming with JavaScript ☑, **Version Control** ☑	Meta
Introduction to Generative AI ☑, **Introduction to Large Language Models** ☑, **Introduction to Responsible AI** ☑	Google Cloud

References

Mr. M.R. Sajeer Ahamed – MSc in Computer Science, Nottingham Trent University
Software Development Engineer, Amazon, London, UK

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