NETHMA DE SILVA

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Skills

- **Languages:** Java • Python • JavaScript • TypeScript • Dart • Swift • Kotlin • SQL
- **Backend:** Node.js • Express • FastAPI • Flask • SpringBoot • REST APIs • Microservices • OOP
- **Frontend:** React • Next.js • TailwindCSS • Flutter • jQuery • HTML • CSS
- **Databases:** MongoDB • PostgreSQL • SQLite • NoSQL • Firebase • Vector DBs
- **Cloud/DevOps:** AWS S3 • GCP • Docker • Kubernetes • CI/CD • Git
- **Other**: LLMs • RAG Pipelines • Machine Learning • TensorFlow • Unit Testing • Cybersecurity • Documentation • System Design

Experience

Founder & Software Engineer — ELEVATE — *London, UK* — **10/2024 - Present**

- Built and launched **Elevate**, an AI-driven SaaS career development platform for software engineers through AI driven features reducing users' career-preparation time by **50%** using **Next.js, TypeScript, TailwindCSS** frontend.
- Orchestrated a scalable and secure backend leveraging latest LLMs**, FastAPI (Python)** and **MongoDB**, integrated with robust **CI/CD pipelines**, ensuring rapid development cycles and seamless deployments.
- Secured competitive funding from the **Ignite Fund** of **£500**, validating Elevate innovation and potential to significantly impact student and professional communities.
- Reduced per-interaction LLM cost by **93 % (from $0.15 to $0.01**) by re-architecting Elevate's AI agents, replacing CrewAI with lightweight, structured-prompt agents without degrading the output.

Software Engineer Intern — BYNERY — *Remote | Amsterdam* — **03/2024 - 09/2024**

- Engineered scalable, responsive web platforms for diverse international clients using **Next.js, TypeScript, and Tailwind CSS**, collaborating remotely across multiple time zones using Agile/Scrum methods to ensure continuous delivery and rapid iteration.
- Developed a sophisticated, interactive geospatial mapping tool integrating environmental datasets, supporting seamless data visualization and analytics for over a **1,000 active user** platform, utilizing **Flask, JavaScript, and PostgreSQL**.
- Optimized and revitalized **50+ years** of a client's legacy data by implementing comprehensive data cleaning and preprocessing pipelines with **Python (Pandas)**, resulting in **100% dataset usability** and integration into robust **PostgreSQL** database systems.

Education

Bachelor of Science (Honours) — University of Westminster — *London, UK* — **09/2022 - 07/2025**

- Major in Computer Science
- Predicted First Class Honours

Leadership & Awards

Microsoft 3rd Place Hackathon Winners — *London, UK* — ***12/2024***

- Led a team of 5 to secure 3rd place at a Microsoft-hosted Hackathon by developing an AI-powered study platform tailored for neurodiverse students, focusing on personalized learning support and accessibility.

Projects

PING PALS - Github — *Remote* — ***08/2024 - Present***

- Co Founded a mobile application which simplifies event creation and coordination for users using **Flutter**.
- Ensured secure and efficient data processing by developing a backend system using **Spring Boot**, **OAuth** to handle authentication with user sessions, profiles, friend lists, and event scheduling.

STUDENT PERFORMANCE PREDICTOR - Github — *London, UK* — ***10/2024 - 12/2024***

- Built a neural network using **TensorFlow/Keras** to predict student grades from demographic and academic data with **R^2** and **MAPE** evaluation metrics on **Google Colab** with **80%** accuracy.
- Engineered a full ML pipeline including data preprocessing, feature expansion, model regularization, and performance visualization using **Python** and **Scikit-learn.**

WILDLIFE CONNECT - Frontend | Backend — *Colombo, SL* — ***10/2023 - 04/2024***

- **Led a team of 5** towards the development of a wildlife conservation and social media app for Sri Lanka using **Flutter, NodeJS, ExpressJS and MongoDB** with features like species identification, recent animal sightings, and wildlife crime reporting.
- Achieved **90%** accuracy in wildlife species identification using a **TensorFlow model**, containerized with **Docker**, managed with **Kubernetes**, and deployed using Google Cloud Run for scalable and cost-efficient inference.
- Engaged **25+** beta users and deployed the app for test users via Google Play Store with an automated **CI/CD** pipeline.