Xuan Tuan Minh Nguyen (Simon)

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Education

Swinburne University of Technology   Hawthorn, VIC
Bachelor of Computer Science (Artificial Intelligence and Cybersecurity).   Feb 2023 – Dec 2025

Experience

Unibuz Pty Ltd.   South Yarra, Victoria
Full Stack Developer | Contractor   Feb 2025 – Present
Developing UniBuz, an AI-augmented social platform for university students, using React/TypeScript, React Native/Expo, and Supabase (PostgreSQL + Deno Edge Functions).

- Built end-to-end AI content moderation using **Gemini 2.5 Flash,** covering text, images, and media across every content type on the platform with **DB-level triggers auto-invoking moderation** on submission, **cutting the cost for manual human reviews** and **boosting the production up to 40%**.
- Implemented a sentiment and wellbeing pipeline that scores all posts and comments via **Gemini**, aggregates **7-day rolling averages** per user, and automatically **raises counselor alerts** when community wellbeing drops, making **student mental health monitoring a first-class platform feature**.
- Engineered **vector-based** people and tribe recommendations using OpenAI t**ext-embedding-ada-002** embeddings stored in **pgvector,** ranked by **cosine similarity** fused with social-graph overlap, **delivering personalised discovery without any manual curation.**
- Architected **40+ Supabase Edge Functions (Deno)** spanning auth, AI services, Stripe payments, anomaly detection, and real-time notifications via AWS SES and Expo Push to form the entire production backend of a full social platform.
- Built an internal **AI translation CLI** using the **Vercel AI SDK** with multi-provider support (**OpenAI, Claude, Gemini)** to automate localisation across .po files, **reducing the translation cost up to 85%**.

Mizco   Perth, WA
Software and AI Engineer | Contractor   Feb 2025 – Present
Developing a client–server, plugin-style multi-agent assistant that ingests PDFs/DOCX/XLSX, normalizes to Markdown and JSON objects, performs semantic chunking + RAG, and auto-completes technical outcome docs with grounded, auditable facts.

- Cut manual document assembly from **~80 hours to minutes**, while maintaining source traceability, accuracy and customisability.
- Architected a privacy-first stack: **Llama-3.1** (orchestrator), **olmOCR** (parsing), **EmbeddingGemma** (embeddings), **FAISS/HNSW** (vector search) in multi-layered tree, FastAPI on private on-prem runtime.
- Delivered agentic tooling to CRUD documents on staff request (update tables, fill cells, rewrite sections) and incremental re-ingest on file changes. Achieved **≥ 90% autofill coverage** with **< 2% error in audits.**

Aqius Enterprises Atlantis Pty Ltd.   Glen Huntly, Victoria
Lead Developer | Apprenticeship   Feb 2025 – Nov 2025

- Architected a secure, multi-device audio logging system using a modern full-stack suite including **Next.js** (web), **Expo/React Native** (mobile), and **Fastify** (backend).
- Engineered a high-performance, type-safe infrastructure using **tRPC** and **Bun,** featuring a **custom Redis-based transport layer** to handle concurrent service communication.
- Implemented robust data security protocols with **server-side RSA encryption** for audio files stored in **MinIO**, utilizing **PostgreSQL with pgvector** for AI vector searching feature.
- Integrated **Whisper AI** and machine learning models to facilitate automated audio transcription and real-time threat detection analysis.
- Coordinated development tasks for a team of six, facilitating code reviews and ensuring alignment on system architecture.

Ballarat Gold Mine   Ballarat, Victoria

Full Stack Developer | Internship   Mar 2024 – Nov 2024
- Planned and developed a Management Information System (MIS) using **NextJS** for the front-end, **tRPC** for the back-end, and **PostgreSQL** for the database.
- Designed an AI-powered reporting module utilizing **Gemini 2.5 Flash** to automatically summarize daily shift logs and identify key operational trends.
- Implemented OCR-based data extraction to automate the digitization of legacy paper-based mining logs, significantly **reducing manual entry errors and processing time**.
- Created a responsive and user-friendly interface to streamline data entry and retrieval processes.
- Ensured robust API integration and seamless data flow between application layers.
- Collaborated with cross-functional teams to gather requirements and enhance operational efficiency.

Projects

MedViệtAI   Ho Chi Minh City, Vietnam
Solution Architect | MedViệtAI's GitHub   Jun 2025 – Present
MedViệtAI is a strategic national initiative, non-profit organisation sponsored by Vietnam's National Data Association (NDA), to assert the nation's sovereignty in the age of Artificial Intelligence. The program delivers foundational, Vietnam-owned LLM/SLM, purpose-built for the Vietnamese language and context. This core technology will power a novel agentic AI architecture designed to tackle critical national challenges, beginning with a transformative focus on healthcare. By leveraging a secure, national-scale data acquisition strategy, MedViệtAI will enable advanced analysis of Electronic Medical Records (EMRs) for proactive health monitoring and personalized medical insights, placing Vietnam at the forefront of AI-driven healthcare innovation.

Simon Nguyen's Portfolio   Melbourne, Victoria
Independent Project | Repository   Jan 2024 – Present
Project's Repository:
My portfolio, built with NextJS, React Query, ThreeJS and EmailJS. This portfolio includes my personal information, my projects which fetch directly from my Github, my CV, hyperlinks to my social media accounts, an anime music player and a RAG-based Chat Bot that answers everything based on my CV.

Youtube Jam   Melbourne, Victoria
Independent Project | Repository   Mar 2025 – Apr 2025
A collaborative streaming platform created with React, TypeScript, and Vite. It utilizes Firebase Realtime Database to orchestrate sub-second synchronization of video states, playback queues, and user presence. The project demonstrates modern client-side architecture using Zustand for global state management and Tailwind CSS for a fully responsive, mobile-first interface.

Alya - Translating Localization with AI   South Yarra, Victoria
Independent Project | Repository   Feb 2026 – Present
Engineered a high-performance CLI application that automates software localization (.po files) into 11 languages using Large Language Models. Originating as an independent rewrite of an internal utility, the tool features a scalable, pluggable architecture supporting native OpenAI, OpenRouter, and local models like Ollama. Built with strict TypeScript, Zod, and Bun, it implements a custom concurrency model for API batching and rate limiting. The developer experience is driven by a React and Ink terminal UI. I developed a smart parsing system that preserves structural placeholders and protects brand names, transforming manual localization into a reliable, single-command workflow.

Skills

Communication Languages: Vietnamese (Native), English (Expert), Japanese (Basic).
Programming Languages: JavaScript, TypeScript, C#, Kotlin, Python, Golang.
Frameworks: React, Next, Expo React Native, FastAPI, Convex, Supabase, ExpressJS.
AI: TensorFlow, YOLO, LLM, VLM, NLP, RAG, Knowledge Distillation, Machine Learning, Deep Learning.
Others: SQL (PostgreSQL, MySQL, SQLite), NoSQL (MongoDB), AWS, Vercel, Railway, (Git), Docker, Push Notifications, Kubernetes, Event-driven Architecture.