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EXPERIENCE

AIRAP, *Founding AI Engineer* Feb 2026 - Jul 2026

- Shipped **EASI App** to production for client █████ — a B2B alcohol-distribution ordering platform (**React Native** mobile, 4 **Vite/React** web portals for admin/sales/driver/inventory, **C#/.NET** Auto-Count accounting bridge, **Supabase** backend). Delivered in 2 weeks as a 2-engineer team.
- Lead engineer on **AeroPlus's AI suite**. Built a compliance records audit tool (**FastAPI**, **Supabase**) that ingests ~10GB PDF/image packages and auto-fills airworthiness checklists (26-item engine, 72-item aircraft) with discrepancy flags + page-level citations — **95% accuracy** on 8 sample audits vs analyst ground truth, HITL clears 5%. Compresses 3–5 analyst-days into minutes for \$500k+ cross-border parts transactions where safety is on the line. Also led **APE** (AI-brokered parts marketplace) and multi-agent supply-demand matching pipelines.
- Hired and onboarded engineering interns; coordinated with the remote development team in Jinan, China; managed hardware procurement (~ S\$25k).

A*STAR ARTC, *AI Research Engineer* Aug 2025 - Mar 2026

- Built a **conversational AI interpretability layer** on top of A*STAR's internal demand forecasting models — translates raw model outputs into natural-language explanations and **SHAP**-driven attributions for non-technical supply-chain planners. Cuts planner workflow from ~40 minutes (manual model setup + interpretation) to ~2 minutes (NL query + AI-explained output) per forecast.
- Three-agent design on **Dify** (intent extraction, tool calling, synthesis) over a **Flask** forecast backend with SHAP + on-demand visualizations; LLMs via **OpenRouter**. v0.1 prototype on 100 SKUs over 12-month horizons, ~3s end-to-end latency.

Hyundai Singapore (HMGICS), *DevOps Engineer* Jan - Jun 2025

- Planned and drove a **monolith** → **19-server** service-isolation migration end-to-end (architecture, role assignments, cross-team approvals, company-wide execution); built **ThingWorx** applications for HMGICS's connected-manufacturing platform.

KABAM Robotics, *Backend Software Engineer* May - Aug 2024

- On the Smart+ team for the **Co-Lab indoor robot** platform: built **PostgreSQL**-backed API endpoints, structured logging, and third-party device integrations; resolved major tech debt by hand-merging a **20,000-line PR** that consolidated two divergent dev branches (a long-running feature branch had forked into a parallel dev branch).

SELECTED PROJECTS

Banyan — collaborative family tree app [banyan.family](#)

- Built for festive gatherings where you meet 40+ relatives and don't know how anyone is connected — **Next.js 16**, **Supabase** (Realtime + RLS), **React Flow**; share-link onboarding lets relatives self-add and instantly visualize the tree.

Virtual Wardrobe — generative AI clothing try-on [virtual-wardrobe.com](#)

- Full-stack web + mobile platform (**FastAPI**, **React/Vite**, **Expo React Native**, **Supabase**) with a self-hosted **ComfyUI** try-on pipeline on RunPod serverless GPU; credit-based **Stripe** billing.

SKILLS

Languages: TypeScript, Python, C#, SQL
AI / Agentic: Claude, Codex, MCPs, Claude Skills, harness engineering, browser-use, evals
Frameworks: React, React Native, Next.js, FastAPI, Supabase, .NET
Tools: Docker, Git, Vercel

EDUCATION

National University of Singapore — B.Eng. Computer Science & Mechanical Engineering May 2026
ASEAN Scholar — selective Singapore Government MOE scholarship