TEOH JIA JING

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Backend team lead at a Kuala Lumpur software agency, working directly with clients from requirements to production. Mechatronics engineer by training, comfortable from offline devices to cloud services and LLM products.

PROFESSIONAL EXPERIENCE

Backend Team Lead, Studio Twenty Sdn. Bhd. **Jul 2025-Present**

Software agency · Backend Developer, Mar 2024-Jul 2025 · Bangsar, Kuala Lumpur · Hybrid

- Lead engineer for the **Singapore Business Federation's Future Readiness Index** - a portal where Singapore companies assess their business readiness; built with Next.js, ElysiaJS and PostgreSQL on AWS.
- Load-tested the portal with **k6** before launch, fixed eight bottlenecks, and presented the results to the client.
- Took the portal through a **third-party pentest** and closed every finding before launch.
- Designed and built a **white-label AI knowledge assistant** - a RAG product over a client's own documents, mixing vector and keyword search so answers cite the right source; runs on OpenAI, Anthropic, Gemini or DeepSeek.
- Built Malaysia's **LHDN e-invoicing** into a hotel group's booking and point-of-sale systems; traced recurring production freezes to an exhausted database connection pool and fixed them.
- Act as **technical point of contact** for clients - scope requirements, write proposals, and walk business stakeholders through trade-offs.
- Mentor backend engineers and run interviews; set up the project template and CI/CD pipeline used across client projects, with checks that block unsafe database migrations.

Software Developer (Part Time), ViTrox Agritech Sdn. Bhd. **Jan 2024-Present**

- Built a **desktop app that works offline** at 3+ customer sites and syncs with the cloud web app when the connection returns, without overwriting edits made online in the meantime; built with Tauri and SQLite.
- Set up release channels so each customer site only gets updates after they are approved.

Industrial Trainee, ViTrox Corporation Berhad **Oct 2023-Jan 2024**

- Built an IoT dashboard in Nuxt 3 for live sensor data and device control, on-site in Penang.

PROJECTS

ReproJS - Embeddable Feedback SDK | Open Source
Bug-report widget that attaches annotated screenshots and the last 30 seconds of a user's session, so developers can see what actually happened. Used across Studio Twenty client projects. Tech: Preact, Nuxt, Docker.

AI Trip Planner | AI / Live Product
Travel planner where the LLM only proposes places and each one is checked against Google Maps before travellers see it, so itineraries never include made-up venues. Live at plantrip.my. Tech: Nuxt, Vercel AI SDK, Gemini, PostgreSQL.

E-Invoicing SDK | Open Source
TypeScript client for Malaysia's LHDN e-invoicing API, with per-endpoint rate limiting; in production on client projects. Tech: Node.js, Vitest.

Insta360 Desktop Client | Reverse Engineering
Controls an Insta360 camera without the official app; protocol worked out from its Android app. Tech: TCP, Protobuf.

Also contributed 10-bit HDR export to palmier-pro (14.5k GitHub stars).

EDUCATION

Universiti Tunku Abdul Rahman (UTAR), Bachelor of Mechatronics Engineering with Honours **Jan 2024**

1st Class Honours (CGPA: 3.73/4.0) · Cheras, Selangor

National Taipei University of Technology (NTUT), New Southbound Policy Elite Study Program **2023**

Taipei, Taiwan

AWARDS

- IEEE Innovation Malaysia 2nd Runner Up, working on a vein finder device.
- DBSnubiz Global Startup (South Korea) 2nd Runner Up, working on a vein finder device.
- Greatech Award for Innovative Excellence Bronze, for the design of an automated assembly machine.

SKILLS

- **Languages & Frameworks:** TypeScript, Rust, Python, SQL, ElysiaJS, Hono, NestJS, Next.js, Nuxt.js, Vue, React
- **Data & AI:** PostgreSQL, pgvector, SQLite, Redis, RAG, LLM APIs (OpenAI, Anthropic, Gemini)
- **Infrastructure & Testing:** AWS (ECS, Aurora, CloudFront), Terraform, Docker, GitHub Actions, k6, Playwright
- **AI Coding Workflows:** Codex, Claude Code, agentic development workflows