

SHAOLONG (JOHN) YIN

Full-Stack Software Developer

Greater Vancouver, BC | 778-751-4079 | shaolong.john.yin@gmail.com | [linkedin.com/in/shaolong-yin](https://www.linkedin.com/in/shaolong-yin) | johnyin.ca

SUMMARY

Full-stack developer (BCIT Computer Information Technology diploma, Dec 2025) who designs and ships production web applications in React, TypeScript, and Node/Deno. Architected and deployed bFluent — an AI-powered, 11-language learning platform with a ~240-component React frontend, a 60-table PostgreSQL backend, and 15 serverless functions — and delivered full-stack features and CI/CD automation at a health-technology startup.

TECHNICAL SKILLS

Languages: TypeScript (strict), JavaScript (ES2022), Python, SQL, HTML5, CSS3

Frontend: React 18, React Router, Tailwind CSS, framer-motion, Recharts, Three.js / React Three Fiber, SVG / Web Audio / WebRTC, PWA (Workbox), accessibility (WCAG 2.2 AA, ARIA), responsive UI

Backend: Node.js, Deno, Express, REST APIs, Supabase / PostgreSQL, PostgREST, PL/pgSQL, Drizzle ORM, serverless functions, OAuth 2.0 / JWT, LLM integration (Gemini, Groq)

Tools & Cloud: Git / GitHub, Docker, Vite, pnpm monorepos, CI/CD (GitHub Actions), Vitest / Playwright, Google Cloud (TTS/STT), Kubernetes / GKE, Figma

PROFESSIONAL EXPERIENCE

Full-Stack Developer — Weltel (mHealth digital-health platform) · *co-op* Jan 2025 – Aug 2025

- Implemented a GitHub App authentication flow (RS256 JWT to installation token to runner-registration token) to automate ephemeral CI compute, removing long-lived access tokens.
- Wired a multi-stage CI/CD pipeline across server, client, and database services with automated linting, static analysis, and Cypress test orchestration, gating deploys on quality checks.
- Containerized services with multi-stage Docker builds, and resolved a multi-day production CI outage by instrumenting DNS, TCP, and HTTP probes to isolate the root cause.

PROJECTS

bFluent — AI Language-Learning Platform · *React 18, TypeScript, Supabase, Deno, LLMs, GKE* · 2026 – Present bfluent.org

- Built a ~240-component React 18 + TypeScript SPA (Vite, Tailwind, React Router) with lazy-loaded routes and multi-role access control, on Supabase / PostgreSQL and 15 Deno serverless functions.
- Architected a 9-tier LLM fallback cascade (Google Gemini to eight Groq models) for AI dialogue and exercise generation, sustaining uptime through provider outages with quota-aware backoff.
- Designed a ~60-table PostgreSQL schema with Row-Level Security (152 policies) and ~50 PL/pgSQL stored procedures for a multi-tenant, cohort-based product.
- Led a WCAG 2.2 Level AA remediation touching 247 component files (ARIA live regions, accessible names, keyboard paths, focus, contrast) to zero axe-core violations, including per-language tagging so screen readers pronounce all 11 study languages correctly.
- Engineered real-time features (LiveKit voice rooms, 7+ Supabase Realtime multiplayer modes), a spaced-repetition engine, and a Manifest V3 browser extension.

Forkcast — Group Evening-Planning PWA · *React 18, TypeScript, Supabase, Google Places/Routes* · 2026 – Present (in development)

- Built a dependency-free decision engine scoring candidate dates on attendance, quorum, and must-have guests, then ranking venues on cuisine approval, rating, travel fairness, and a 12-tag dietary risk model — 29 unit tests.
- Wired a 3-tier test pyramid into CI from day one: Vitest units, pgTAP tests asserting cross-user data isolation, and Playwright end-to-end across desktop and mobile.
- **Backchannel** — Email-as-chat client; AES-256-GCM token sealing over OAuth 2.0. In development.
- **JohnSouls** — WebGL portfolio game (React Three Fiber); 23 headless tests. In development.

EDUCATION

British Columbia Institute of Technology — Diploma, Computer Information Technology

Jan 2023 – Dec 2025

Algorithms Tutorial Lead; web development in JavaScript, Python, Django, and Flask.