

ANDREW SHEN

Software Engineer | TypeScript | Next.js | React.js | WebGL

in LinkedIn: <https://linkedin.com/in/andrewshen55> Portfolio: <https://andrewshen.io>

Phone: (437) 557-6235 Email: andrewshen.works@gmail.com Location: Toronto, ON, Canada (willing to relocate)

SUMMARY

A 7-year track record in software development, specializing in building scalable, low-latency, and **responsive web** applications using **TypeScript**, **React**, and **Next.js**. Adept at writing **unit tests** and ensuring the security to comply with the enterprise's standards. Experienced in **optimizing CI pipeline**, **containerization**, and deploying **microservices** on **AWS**, **GCP**, and VPS. Proven ability to integrate cutting-edge technologies, like AI, Web3, and 3D visualization.

PROFESSIONAL EXPERIENCE

Software Engineer

Cognitive3D

📅 Sep 2025 - Present 📍 Remote, Canada

- Reduce server bandwidth by optimizing GLTF 3D file parsing to load assets (textures, meshes) from the AWS CloudFront CDN cache.

Frontend Engineer

Web MR solution (Mindtrix Ltd.)

📅 Jul 2022 - Aug 2025 📍 Remote, Taiwan

- Implemented JSON-LD, server components, and image prefetching to achieve perfect SEO scores in Core Web Vitals for Next.js projects.
- Developed responsive 3D asset React components that reduced mobile load time by 40%.
- Built an AI-powered chatbot MVP with React for product inquiries with OpenAI's Assistants API and GPT-4o, saving 300+ customer service hours monthly, including off-hour support.
- Built database schema and secure RESTful API services with over 70% coverage unit tests using Nest.js, Jest, and MariaDB to comply with Fortify and Mend analysis for a Taiwanese semiconductor manufacturer.

Frontend Engineer

WaCare TeleHealth (La Vida Tec Co., Ltd) 📅 Mar 2017 - Jun 2022 📍 Taichung, Taiwan

- Designed and implemented reusable, scalable React components to reduce team development time by 40%.
- Mentored two junior frontend developers by conducting React code reviews and maintaining conventions, cutting onboarding time by 50%.
- Introduced TypeScript to Next.js projects, improving code reliability and reducing bug-fixing time by 35% before production in 2019.
- Developed responsive and cross-browser compatible websites (Health CRM System, Healthcare Course) and streamlined UI/UX with designers.
- Collaborated with backend engineers to reduce the WaCare app load time by 73%, improving performance from 3,000ms to 800ms through redesigned UI threads and optimized API caching.
- Collaborated with DevOps to decrease the deployment time of the CI pipeline from 9 minutes to 5 (44% improvement) by shrinking image size.

ERP Software Engineer (Co-op)

Frensworzk Software Ltd.

📅 May 2015 - Feb 2016 📍 Taipei, Taiwan

- Integrated the former member system into the "NetSuite" cloud service.
- Integrated payment and logistics APIs using JSP for the e-commerce site of a well-known Japanese department store.

CERTIFICATION

- AWS Certified Solutions Architect - Associate Certificate 📅 Jul 2025 - Jul 2028
- HackerRank - Frontend React Developer Certificate 📅 May 2025 - permanent

INTERNATIONAL EXPERIENCE

Flow Blockchain Hackathon

📅 Apr 2023 📍 Vancouver, Canada

- Awarded for integrating a hybrid custody wallet with Web 2.0 SSO UI/UX.

AI & Big Data Expo

📅 Dec 2018 📍 California, USA

- Illustrated how WaCare monitors personal health records from wearable devices to predict health risks at the Santa Clara Convention Center.

SKILL

- Programming Languages
JavaScript (ES6+), TypeScript, Java, Kotlin
- Web Languages and Guidelines
HTML, Pug, CSS, Sass/SCSS, Web Content Accessibility Guidelines (WCAG)
- UI Libraries and APIs
React.js 19, React Hook Form, Zod, Three.js, WebXR, React Three Fiber
- State Management Libraries and APIs
Redux Toolkit, Redux-Saga, Zustand, Context API
- Frameworks
Next.js 15, Nest.js 10, Tailwind CSS 4
- CMS
Sanity, Strapi, Wix
- HTTP Requests Library and APIs
Axios, Fetch API
- AI Integrations
GPT-4o, DeepSeek-V3, n8n
- API Architectures
RESTful API, GraphQL
- Authorization and Cryptography
OAuth 2.0, JWT, RSA/ECC/AES encryption
- Testing Libraries
Cypress, Jest, React Testing Library
- Database Schema Designs
MySQL, MariaDB, PostgreSQL, MongoDB
- Continuous Integration and Deployments
Gitflow, Dockerization, GCP, AWS, Vercel, Nginx, Cloudflare, Microservices
- Operating Systems
CentOS, Debian, Ubuntu
- Productivity tools
Jira, Confluence, G Suite, Slack, Figma

STRENGTH

- Growth Mindset
Proactively recommended initiatives, like upgrading SPA to Next.js, adding type-safe tools, and holding workshops for teams' continuous improvement.
- Problem-solving Mindset
The hands-on experience in the WaCare TeleHealth startup cultivated my ability to interpret ambiguous requirements into approachable tasks.
- Cross-functional Teamwork
Coordinated agile development across Design, Backend, Frontend, QA, DevOps, and Marketing teams to close gaps and deliver on time.

EDUCATION

Bachelor's Degree in Information Management
Yuan-Ze University

📅 Feb 2012 - Jun 2016 📍 Taoyuan, Taiwan