Ferdinand Zhang

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EDUCATION

A.Y. Jackson Secondary School — Toronto, ON
AP Student — GPA: 4.0 — SAT: 1570 — *Expected Graduation: 2026*

- AP Scores: Calculus BC (5), Physics 2 (5), Computer Science A (5), Microeconomics (5)

EXPERIENCE

Software Engineering Intern — Jul. 2025 – Aug. 2025
SimCare AI — San Francisco, CA

- Built a full-stack LMS enabling institutions to assign, track, and manage clinical simulations; adopted by UPenn and Vanderbilt, contributing to a 6-figure ARR pipeline
- Implemented real-time observability tooling to monitor simulation sessions, surfacing performance metrics and error traces to accelerate debugging
- Engineered animated avatar system with smooth state-driven motion for AI patient simulations; worked closely with CTO and personally presented features to university stakeholders

Web Development Executive — Oct. 2025 – Present
Hack the 6ix — Toronto, ON

- Selected from 150+ applicants to develop the web platform for one of Canada's premier hackathons with 500+ participants worldwide
- Architected and shipped key frontend and backend features using React, TypeScript and Python, improving registration flow and participant UX
- Organized miniature hackathons and sponsor events to gain participants and sponsors

SAT Bootcamp Tutor — Jan. 2026 – Present
Schoolhouse.world — Toronto, ON (Remote)

- Selected by College Board to be an official SAT Bootcamp Tutor
- Lead structured weekly sessions for groups of 10–15 students, covering math and reading strategies to improve scores by an average of 100+ points

PROJECTS & AWARDS

Personal VPN Developer — 2024
Self-Initiated — Toronto, ON

- Engineered a custom VPN using WireGuard and a self-hosted cloud server to bypass school network restrictions, configuring DNS, IP routing, and encryption protocols from scratch

Flowboard — Nov. 2025
HackWestern — Toronto, ON

- Built AI assistant using React, Python, and Google Cloud that generates animated videos from hand-drawn sketches using computer vision and generative AI pipelines
- Acquired 1000+ users organically; won 2nd place at Hack Western by pioneering multi-video merging for sequential film creation

SimTeach Developer — Best AI Hack Winner — Sep. 2025
PennApps — Philadelphia, PA

- Built platform for teachers to practice with AI students featuring customizable personalities

Act2Learn Developer — MLH Best Gen AI Winner — Jan. 2025
UOttaHack 7 — Ottawa, ON

- Developed educational website with role-play elements to enhance youth engagement in studying

Badminton Achievements — 2022 – Present

- 20+ National Championships — #1 Ranked Junior — National Team member

Academic Recognition — 2024

- Senior CCC 2024 Group 1 Honor Roll — Coding Club Homework Helper

TECHNICAL SKILLS

Development: C++, Python, JavaScript, Java, HTML, CSS, TypeScript
Frameworks & Tools: React, Express, SQLite, GitHub, Google Cloud, 3D Modeling, Gadget
Languages: English (Native), Japanese (Fluent), Mandarin (Fluent)