Yibo Chen

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Education

University of California, Los Angeles Sep 2025 - Current
Masters of Science - Electrical and Computer Engineering *Expected Dec 2026*

- **Coursework**: Design of VLSI Circuits & Systems, VLSI Design Automation, Neural Networks & Deep Learning, Embedded Systems, Advanced Computer Architecture

University of British Columbia Sep 2020 - May 2025
Bachelor of Applied Science - Computer Engineering — GPA: 3.72

Work Experience

Circle Cardiovascular Imaging May 2023 - Aug 2024
Software Development Intern *Calgary, AB*

- Engineered core C++/Qt diagnostic modules for FDA-cleared cardiac imaging software, implementing CT surface-editing workflows in a 6-month design to FDA approval cycle, the fastest in company history.
- Delivered production-ready features for initial release of cvi42's web client using React and Redux, establishing automated Jest test coverage that improved release stability and reduced regression bugs.
- Integrated and maintained third-party imaging, licensing, and localization systems (Adas3D, RLM, translation services), coordinating with vendors to deploy updated versions into the company's core product.

Research & TA Experience

Systopia Jan 2025 - May 2025
ML Systems Researcher (Memory Prefetching) *Vancouver, BC*

- Adapted and optimized time-series models (e.g., TSMixer) for memory-access prediction, benchmarking performance on system traces and modifying architectures to achieve over 35% prediction-accuracy improvements on custom workloads.

UBC ECE Sep 2024 - Dec 2024
Operating Systems Teaching Assistant *Vancouver, BC*

- Led hands-on OS instruction and debugging for 125+ students, resolving Linux, Git, and kernel-level workflow issues.

Technical Projects

SymStride Sep 2025 - Dec 2025
Supervised by Prof. Mani Srivastava

- Architected and open-sourced a camera-free, IMU-based 3D gait analysis system using neural pose models (SMPL, MobilePose), achieving 89% agreement with industry-standard commercial software on knee kinematics and 100% on arm-swing classification.

Artist Time Vault Sep 2024 - May 2025

- Built and shipped a full-stack content-release platform (React, NestJS, PostgreSQL, AWS S3) with CI/CD, later transferred to Holdr and used in production by artists to distribute time-locked digital assets.

FPGA-Accelerated Chess Engine Jan 2023 - May 2023

- Designed and implemented hardware-accelerated neural-network pipelines using C and SystemVerilog, decreasing Leela Chess Zero model inference time by over 10%, validating performance with testbenches in ModelSim.

Skills

Software: C++, C, Python, JavaScript, React, Qt, SQL

Digital Systems & VLSI: SystemVerilog, Verilog, Quartus, ModelSim, Synopsys, Cadence

Tools & Infrastructure: Git, Docker, Linux, CI/CD (GitHub Actions), AWS