

JALEN CHENG

COMPUTER ENGINEER// [WEBSITE](#) // [LINKEDIN](#) // [GITHUB](#)

CONTACT

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EDUCATION

University of Waterloo

2024-2029

Student BASc, Comp. Engineering

- President's scholarship of distinction, 2024
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ASSETS

- C++, TypeScript, Python
 - Figma, PhotoShop, React, Tailwind CSS
 - Firebase, Supabase, AWS
 - REST & OSLC APIs
 - Office Suite, SharePoint, Git, VMware
 - English, Mandarin, French
 - Soldering, Assembly, Wiring
 - NATO Secret & GGP clearance
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ACHIEVEMENTS

- University of Waterloo Engineering Society Representative
- Finalist for Kiwanis Club's Rick Barrigar Scholarship
- NCSSAA Junior Badminton Mixed doubles Champion
- 4x Honour Roll, 2x Silver medal recipient at Colonel By SS
- Varsity Badminton, Volleyball at Colonel By SS
- DELF B2 Certificate

WORK EXPERIENCE

Avionics Technician / Engineering Specialist

January 2025 - April 2025

General Dynamics Canada (MAISR ISS Program)

- Developed & tested Python scripts to communicate with IBM EWM via RESTful & OSLC APIs
- Completed hundreds of preliminary interactions via cURL and Postman in a test environment
- Visualized & managed project metrics via PowerBI & Excel, ensuring adherence to DND standards
- Delivered & presented 10+ security-critical items approved by DND for use with MAISR aircraft

Hardware Technician

August 2018 - September 2024

Self-Employed

- Rigorously researched, planned and built 10+ computer systems and peripherals
- Modelled and performed various hardware modifications to meet specific product demands
- Applied hands-on skills including soldering, wiring, and hardware assembly of 100+ parts
- Performed technical analysis to ensure seamless operation and integration of components

Hockey Referee

September 2022 - December 2023

District B Officials Association

- Ensured players' adherence to hockey rules and regulations during games, maintaining decorum
 - Facilitated conflict resolution, demonstrating effective decision-making and problem-solving skills
 - Communicated with coaches, players, and 2 other officials to promote a cooperative environment
 - Enforced split-second decisions under high-pressure situations, requiring precision and accuracy
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VOLUNTEER EXPERIENCE / PROJECTS

Research Assistant

December 2023 - March 2024

Collingwood General and Marine Hospital

- Co-authored a research paper developing deep-learning algorithms for analyzing wrist x-rays
- Trained model to recognize fractures or acute injuries with 1000+ self-labelled datasets
- Gained knowledge and interest in machine learning and artificial intelligence from industry leaders
- Coordinated communication between professor at the University of Illinois and physicians at Collingwood General Marine Hospital, bridging the gap of knowledge between fields.

VP Outreach

March 2020 - August 2020

Frontline First

- Directed outreach efforts, gaining support and raising over \$10,000 in PPE for frontline workers
- Received sponsorships from multinational corporations like Clif, Garnier, Starbucks and more
- Acquired additional funding valued at \$140,000 for additional vulnerable communities
- Built strong relationships with donors, community leaders and other nonprofit organizations

EasyASL

October 2024

Hack The Valley 9 - Winner (Best First Year Hack)

- Developed proof-of-concept, algorithm, API stack and Figma wireframe for AI sign language tool
- Integrated Google Cloud API, created dataset for OpenAI API and aided in PicsArt API handoff
- Built certificate page to generate unique immutable UUIDs for user verification in TypeScript
- Contributed to numerous UI/UX assets in PhotoShop, implementing designs with React

Lunero

January 2025

BUILD / Launchpoint - Nominee

- Selected as one of 8 teams from 300+ applicants to build & pitch a startup in 14 days
- Headed Lunero's pitch to VC's from a16z, Sequoia capital and other notable companies
- Launched a fully functional webapp using TypeScript, React and FireBase for authentication
- Proposed Lunero's matching algorithm to connect real estate agents with users via OpenAI API