# Felix Fong

416-268-0291 | felixfong58@gmail.com | [linkedin.com/in/felixfong58](linkedin.com/in/felixfong58) | [github.com/fvcci](github.com/fvcci)

Enthusiastic Software Engineer with proficiency in leadership, web design, competitive programming, and educating.

## EXPERIENCE

**[Intel Corporation](#)** — May 2023 – August 2024
*Software Engineer - PEY Intern at Intel* — *Toronto, ON*
- Collaborated in a team of **6** on Quartus Static Timing Analysis (STA) and Synopsis Design Constraints (SDC) for Field Programmable Gate Arrays (FPGA) primarily using C++.
- Proposed and developed a graph propagation algorithm improving user reliability of **11** SDCs by iterating based on stake holder input on **21** UML and flow chart diagrams that impacted **6** subsystems.
- Developed SDC unit testing infrastructure, achieving a **0% to 94.7%** code coverage improvement.
- Facilitated in removing **3562** lines of technical debt, seeing approximately **100%** productivity improvements in SDC development.

**[Deltahacks](#)** — November 2022 – Present
*Technical Executive* — *Hamilton, ON*
- Streamlined hackathon evaluation process by creating a comprehensive review program, enabling efficient grading of **1365** participants by leveraging **shadcn/ui** and **prisma ORM**.
- Optimized the review page to be **324%** faster than the previous year's by improving database architecture.
- Facilitated event scheduling by developing a robust schedule page that successfully managed **1522** sessions over **3** days, resulting in improved participant experience and smoother event coordination.

**[McMaster Competitive Programming Club](#)** — August 2022 – April 2023
*Vice President of Training* — *Hamilton, ON*
- Taught advanced data structures and algorithms in Python in anticipation for the **International Collegiate Programming Contest** (ICPC).
- Hosted an Intel sponsored competition for **$150** in prize money resulting in **35** participants.

**[McMaster Department of Computing and Software](#)** — May 2022 - August 2022
*Research Assistant* — *Hamilton, ON*
- Facilitated with implementing the **ChaCha20-Poly1305** encryption algorithm using **Haskell**.
- Improved data analysis capabilities by developing a graphing tool that fits **600** data points to probability distributions utilizing scipy and numpy librariesl.

**[McMaster Start Coding](#)** — September 2021 – August 2022
*Web Developer* — *Hamilton, ON*
- Enhanced user experience on the McMaster Start Coding website and attracted **119** new users.
- Optimized the ELM based website to reduce Google Lighthouse's Speed Index by **86%**.

## PROJECTS

**[Path Finding Sandbox](#)** | *Typescript, ReactJS, ViteJS, Tailwind* — August 2022 – Present
- Developed a **graph theory** path finding visualization tool to visualize **6** algorithms

## TECHNICAL SKILLS

**Languages**: C/C++, TCL, Perl, Typescript, Javascript, HTML, CSS, Rust, Elm, Python, Java, Haskell, Bash, SQL
**Libraries and Frameworks**: ReactJS, JSX, Tailwind, NextJS, Bootstrap, Java Swing, shadcn/ui, Prisma ORM, Axios, NodeJS, ViteJS, MongoDB, Payload CMS
**Developer Tools**: GitHub, Git, Jira, Perforce, Linux, Apache Maven, Google Cloud

## EDUCATION

**McMaster University | 3.9 GPA** — September 2021 – April 2026
*Candidate for Bachelor of Applied Science, Computer Science* — *Hamilton, ON*

## ACHIEVEMENTS

McMaster Faculty of Engineering – **Engineering Award of Excellence Scholarship ($3000)** — June 2021
Bur Oak Secondary School – **Award of Merit for Grade 12 Data Management** — June 2021
Euclid Waterloo Math Contest – **Certificate of Distinction (Top 25%)** — May 2021