

Motivated and quick-learning Software Engineer with over two years of experience. If you feel like my skills or expertise align with what you need, please feel free to shoot me an email!

EXPERIENCE

Software Developer (Micro-controller)

Aug, 2021 - Current

Waterloop, a hyperloop team

- Contributed to the micro controller firmware for one of the largest student-led hyperloop teams in Canada.
- Collaborated with other team members to develop and rigorously tested the firmware using tools and technologies including C, Python, Git, GitHub.

System Integration Coordinator - Outstanding Co-op rating (best possible)

April, 2021 - Aug, 2021

Strauss Event & Association Management

Winnipeg, MB

- Developed documentation revolving project management software(**ClickUp and Asana**) for national associations including the Canadian Jewellery Group, Pedorthics Association of Canada, the College of Pedorthics, and Promotional Professionals of Canada.
- Developed **Python** applications to automate report generation by querying data from membership databases of over 3000 members; eliminated the need for temporary workers for this job. Saving the company over **\$3,000** each quarter.
- Reduced the number of software dependencies by 30% which brought business software costs down by 40%.
- Coordinated major events such as the Canadian Jewellery Group Buying Show (over **\$5 million** in cash flow)

Sales Associate (Top Salesman in Ontario)

Nov, 2017 - July, 2020

Mark's Workwear

Windsor, ON

- Maintained excellent customer service and ensured customer satisfaction.
- Process cash payments and deposit slips.
- Upsold and marketed the Canadian Tire Mastercard as the **# 1 salesman** in the south western Ontario region. Had a higher sales stat than over **60%** of the stores alone.

PROJECTS

QuickChat, Real-time Chat Application

<https://romantic-heyrovsky-3c637f.netlify.app>

- A chat room web app that allows users to join a room with a room key both anonymously or as a sign-in user.
- Developed a real time chat application utilizing technologies including **React and Firebase**.
- Provides optional authentication methods including Google Sign-in or Username and Password from the webapp.

kefancao.com, A portfolio website

<https://kefancao.com>

- A portfolio website showcasing myself and some of my skills and projects.
- Utilizes **CSS 3D** transformations to create animated objects such as business cards and project cubes.
- Applied concepts of Linear Algebra and Trigonometry in combination with **React** to achieve animation.

QuickType, Typing Test Web App

<https://quicktype.tech>

- A typing test web app that supports timed typing tests which gives an accurate adjusted word per minute to the user.
- Incorporates dynamic styling of characters to signal user if correct or incorrect.
- Created using a combination of **React and Firebase** (to store user history).

River Deliver, Founder (2020 Summer Company Winner)

July 2020 — Aug 2020

- A grocery delivery/errands company, winner of a \$3000 Entrepreneurship Fund from a pool of 70 applicants.
- Developed a fully functional ordering web app using React, Firebase, and Email.js.
- Attracted over 100 users/customers throughout the summer.

EDUCATION

Bachelor of Computer Science, University of Waterloo, GPA: 4.0/4.0

Sept 2020 — June, 2025

Coursework: Object-Oriented Software Development - 100%, Advanced Algorithmic Design - 100%, Functional Program Design - 96%

TECHNICAL SKILLS

Programming/Scripting Tools/Technologies

Bash, C, C++, Java, Javascript, Python, SQL
HTML/CSS, Bootstrap, Git, LaTeX, Firebase, NoSQL, MySQL, MongoDB, React.js, Node.js, UML (Unified Modelling Language)

AWARDS & HONORS

2020 Ontario Entrepreneurship Award (\$3,000); President's Scholarship(\$2,000)