

# Caleb Tiger Choi

Cell Phone: +1 (519) 591-2828  
E-mail: caleb.choi@uwaterloo.ca

Website: calebchoi.me  
GitHub: github.com/Qwe1rty

## SKILLS

Java, C, C++, Arduino, HTML, CSS, Linux, Git, Nginx, Swing

## PROJECTS

- **REMOTE MONITOR [JAVA]**
  - ◆ A centralized, real-time LAN keylogger/screenviewer that allows for monitoring of multiple computers
  - ◆ Connections implemented by **TCP/IP sockets** and handled concurrently in **multiple threads**
  - ◆ Uses the **jnativehook** library for global input, and the GUI is built with the **Java Swing** library
- **CLOCK SUITE [ARDUINO, C, C++]**
  - ◆ A 24-hour adjustable clock displayed through binary LED indicators and an LCD
  - ◆ Includes stopwatch and timer functionality, which can run concurrently with the global clock
  - ◆ Runs off the **Arduino MEGA**, using internal delays for synchronization to an accuracy of **±4 seconds** per hour
- **CHINESE CHECKERS CLIENT [JAVA]**
  - ◆ An AI Chinese checkers client that competes against 5 opponent AIs over a LAN tournament
  - ◆ Created the AI, implementing a dynamic **depth first search** algorithm which won first place in **5/9 rounds**
- **RHHS EVENT PLANNER TOOL [JAVA]**
  - ◆ Organizes registration, table seating, and food preferences, for any social event
  - ◆ Implemented the **modular data system**, allowing for customizable food, table, and ID options
  - ◆ Created the **file handling**, and the **instant updating search** functionality
- **CALEBCHOI.ME [HTML, CSS]**
  - ◆ Personal portfolio, built from scratch using HTML and CSS, and runs on **Nginx**
  - ◆ DNS and backend is personally managed through an Ubuntu VM on **Google Cloud Engine**

## WORK & ACTIVITIES

- **RHHS COMPUTER SCIENCE CLUB EXECUTIVE (August 2015 – June 2017)**
  - ◆ **Ranked 1<sup>st</sup>** in the McMaster University Science Olympics software challenge
  - ◆ **Provincial finalist** in the 2016 ECOO team programming competition
  - ◆ Helped organize, manage, and teach the Python and Linux classes of around 20 people
- **KID'S GREAT MINDS (July 2013 – August 2013)**
  - ◆ Taught and tutored Java and Scratch programming at a summer camp

## EDUCATION

- **UNIVERSITY OF WATERLOO (September 2017 – April 2022)**
  - ◆ Candidate for Bachelor of Software Engineering (BSE)
  - ◆ Dean's Honours List for term 1A (>88% term average)
- **RICHMOND HILL HIGH SCHOOL (September 2013 – June 2017)**
  - ◆ Received a 5 on the AP Computer Science exam

## INTERESTS & ACTIVITIES

Programming, composing music, cooking, table tennis