# Daniel Chen

## Summary of Skills \_\_\_\_\_

Languages: Python, Java, C, Scheme, HTML, CSS

Tools/Frameworks: Android Studio, Bootstrap, Flask, Git, Microsoft Office, MongoDB

Others: Native fluency in English and Mandarin

#### Education ———

#### **University of Waterloo**

Sept 2018 – Present

- o Candidate for **Bachelor of Computer Science** in the Faculty of Mathematics, currently in term 1B.
- o Cumulative GPA of 3.98, with an average of 97% in computer science/math courses.

### **Projects**

**RemindMe!** Jan 2019 – Feb 2019

Python, Flask, MongoDB, HTML

- A web app that allows users to register and keep track of their current topics of focus and create short notes and reminders on each topic.
- o Allows the creation, editing, and deletion of notes and the registration and login of accounts
- o Features a clean and modern user interface.
- o Implemented HTTP request methods and sessions to allow users to interact with the database.

#### COptimism - A Virtual Chess Engine (Starterhacks 2019)

Jan 2019

Python, Pygame

- o Built a virtual chess engine using Python.
- o Made a proper graphical user interface using the Pygame module.
- Utilizes the minimax algorithm and a self-written AI heuristic to determine the best move on the board after a series of
  evaluations.
- Able to calculate low-depth at a reasonably high speed.

Conversions App Dec 2018

Java, Android Studio

- Developed a mobile app using Android Studio that allows the calculation of conversions between common units.
- o Supports five types of conversions, including clothing sizes, height, weight, temperature, and time.

#### **Automatic Motion Sensor Lamp**

May 2018

Raspberry Pi, Python, PIR sensors

- o A motion sensor lamp built with Raspberry Pi and python, using relay switches, PIR sensors, and GPIO.
- Detects passive infrared waves and remains on as long as new signals are sent once every 30 seconds.

## Work and Volunteer Experience \_\_\_\_\_

Private Tutor May 2015 – June 2018

- Tutored students ranging from grade 6-12 on elementary/high school level mathematics, sciences, and computer science languages.
- o Reviewed School work and self-prepared study material, notes, and homework for students.
- Aided and prepared students for upcoming math/computer science contests.

#### **Teaching Assistant – MPM Math School**

Dec 2014 – May 2016

- o Marked assignments, quizzes and tests
- Communicated effectively with children in grades K 7.

#### Hobbies and Interests \_\_\_\_