

1B SOFTWARE ENGINEERING · UNIVERSITY OF WATERLOO

Skills____

Languages Java, Python, C++, C, JavaScript, HTML, CSS, Bash, SQL Frameworks/Tools Git, Flask, React, PostgreSQL, Heroku, Tkinter, Swing

Projects_____

WEBSITE C

Jan. 2021 to Present

Mar. 2021 to Present

- Constructing portfolio website from scratch and deployed to GitHub Pages.
- Implemented a theme switcher using CSS and JavaScript.

Bug Tracker 🖸

- Developing a bug tracker in **Python** using the **Flask** framework.
- Used **PostgreSQL** to manage the database and deployed to **Heroku**.

ANTI-RONA LOCK SYSTEM 🗗

Oct. to Dec. 2020

- Integrated our software components using object-oriented programming and functional programming in Python.
- Designed and implemented a **graphical user interface** using **Tkinter**.
- Communicated effectively with everyone, allowing integration and completion of the project one week before the deadline.
- Debugged my teammate's code, a foundational part of our project, successfully.
- Derived and implemented the mathematical formulae for distance calculations in **Python**.

CHESS 7

May to June 2019

- Built Chess from scratch with **Java** and **object-oriented programming** principles.
- Created a complete graphical user interface with movement animations using Java's Swing toolkit.
- Implemented undo/redo, saving/loading, and additional features.

Experience _____

Kumon Educational Japan Co. Ltd.

Cambridge ON, Canada

GRADER

2017 to 2018

• Graded thousands of worksheets and helped students discover solutions to math problems.

Awards

UWATERLOO PRESIDENT'S SCHOLARSHIP OF DISTINCTION

2020

• 95+ admission average

AP SCHOLAR WITH DISTINCTION

2020

• 5/5 on all AP exams

CAYLEY (MATH) CONTEST SCHOOL CHAMPION

2018

• Top 1% of 24,709 contestants

Education _____

University of Waterloo

Waterloo ON, Canada Sept. 2020 to Apr. 2025

CANDIDATE FOR BACHELOR OF SOFTWARE ENGINEERING

• 96.64 Cumulative GPA

March 12, 2021 David Xu · Résumé 1