

# HAYDEN YAP

University of Waterloo · 2B Computer Science · #20684211

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## Experience

University of Waterloo, Department of Psychology · IT Support

May 2017 – September 2017 · Waterloo, ON

- **Designed, debugged, and deployed** working Perl scripts to scrape, organize, and output information about faculty hardware.
- **Troubleshooted and repaired** systems, hardware, and network problems for 100+ employees.
- **Inspected, configured, and tested** new hardware daily to ensure optimal performance and functionality.
- **Recovered and restored** sensitive data on desktops, laptops, and many different types of external storage devices.

## Projects

Personal Webpage – HaydenYap.com · 2018

- Used **JavaScript** and various libraries such as **BootStrap, jQuery, React, and Redux** to create a program that generates **HTML** to produce an easily expandable webpage.
- **HTML** elements are generating by passing an **JavaScript Object** to **React components** whose state is maintained with **Redux Store**.

Pomodoro Clock · 2018

<https://github.com/HaydenYap/Pomodoro-Clock>

- Utilized the **React** library to construct and display the user interface
- Used the **Redux** library to maintain the application state of the clock.

Compiler · 2018

- Built a compiler for a subset of C using **Scala** that targets the MIPS instruction set architecture.
- Created **methods** and **algorithms** to perform lexical, context-free, and context-sensitive analysis.
- **Automated testing** using **scripts** to ensure that each stage of compilation is working as intended.

Tetris · 2017

- **Developed** an adaption of Tetris with a functioning GUI using **C++** and **OOP principles**.
- Used MVC to organize the modularization of game components.
- Deployed Observer Pattern for real-time reactive response to change in game state.
- Performed **black-box** and **white-box testing** to ensure game mechanics were efficient and functional.

## Languages

- C++
- C#
- C
- Java
- JavaScript
- HTML

## Technologies

- Bootstrap
- jQuery
- React
- Redux

## Education

University of Waterloo

Waterloo ON · Sept 2016 - Apr 2021

- Candidate for B.CS, Co-op

## Activities

Community Administrator

Online Community · June 2016 - present

- Organized events for an online gaming community with a population of 60+ active users.

Student Council Representative

Albert Campbell C.I. · Sept 2015 - June 2016

- Worked as a medium of communication for students to school administrative staff and external event

## Interests

- Algorithms
- Game Development
- Computer Hardware
- Basketball
- Board games