

# YOUSOF HOSNY

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## PROJECTS

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### **Personal Website** *HTML, CSS*

A modern website featuring markdown/LaTeX notes for various courses completed at University of Waterloo.

### **Visual Studio Code LaTeX Extension** *Javascript*

An extension for taking LaTeX notes in Visual Studio. Allows for custom macro definitions and auto-complete increasing overall note-taking speed.

### **Cliffed Ball** *Python, Pygame*

A desktop game with a full user interface (settings, home page, game, store page) and ability to save game state.

### **VertiShot** *Swift*

IOS app that enables users to take vertically or horizontally aligned photos using the phone's gyroscope. Intended for architectural photos and scanning documents using the camera.

### **Maze Backtracker** *C++*

A command-line maze generator created to help visualize a recursive backtracking algorithm for maze generation.

### **Robotics Soccer Simulation** *Python, Pygame*

Simulation environment for different artificial intelligence strategies to be tested against each other. Used by high school robotics team to develop and rank strategies to be used in competitions.

### **Mood Lift** *HTML, CSS, JavaScript*

Hackathon project for helping track mental health in children. The web app consists of a simple daily quiz which stores the user's daily mood and offers long-term insights.

## EXPERIENCE

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### **3D Diagnostix**

*Web Developer Intern - Unpaid*

Toronto, ON

Jul 2018 - Aug 2018

- Created a mobile friendly table lay-out for the in-house CRM software used by employees
- Developed the web app in HTML, CSS, and Javascript using Cordova to port to mobile
- Integrated the web app with the company databases using SQL

## SKILLS

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Languages: C, C++, Python, JavaScript, Scheme/Racket, HTML, CSS, SAS  
Tools: Git, Github, LaTeX, Pygame  
Software: Excel, Word, Vim

## ACHIEVEMENTS

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### **Waterloo Euclid Senior Mathematics Contest**

Scored in the top 10% of participants

University of Waterloo

April 2019

### **Cyber Patriot National Medalists**

Achieved silver medal as a team in the Canadian cyber security competition finals.

Air Force Association Cyber Patriot

May 2019

## CERTIFICATIONS

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### **CPA - C++ Certified Associate Programmer Certification**

object-oriented model and its implementation in C++

C++ Institute

Jan 2018

### **SAS - Certified Base Programmer for SAS 9**

manipulate and transform data in SAS, combine SAS data sets, create summary reports using SAS procedures

SAS®

Jun 2018

## EDUCATION

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### **University of Waterloo**

BCS Computer Science (Class of 2024) *GPA: 3.88*

Waterloo, ON

Sep 2019 - Current