YOUSOF HOSNY

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SKILLS

Languages:	C++, Python, C, Bash, JavaScript, Racket, SAS, R, HTML/CSS
Technologies:	React, Node, Pygame
Software / Tools:	Linux, Vim, GNU tools, Git, Github

EXPERIENCE

University of Waterloo — Waterloo, ON
Teaching Assistant — *Winter 2021*
- Marked student assessments for MATH138 (Calculus II)

The Product Initiative - ConnectEd — Toronto, ON
Software Developer - Full Stack — *Summer 2020*
- Worked as part of the developer team creating an app to connect students by matching based on common interests
- Developed a prototype app using serverless stack with React Native and Firebase cloud services. Prototype demonstrated user authentication flow, base user interface design, and user matching.

3D Diagnostix — Boston, MA
Web Developer Intern — *Summer 2018*
- Created a mobile friendly (HTML/CSS) table lay-out for the in-house CRM used by employees to view current client information and orders
- Introduced to collaborative software development and RESTful API design

PROJECTS

Straights Card Game *C++*
Object oriented implementation of the Straights card game with use of Model View Controller and Strategy design patterns. Adhered to RAII principles through use of smart pointers and STL containers and algorithms.

Coursaver *Python, Selenium*
Automates two factor authentication and downloading of online content for multiple UW Learn courses. Designed to allow quick and convenient saving of all course content for future reference.

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

Conway's Game of Life *C++*
Implementation of Conway's game of life using object oriented observer design pattern. Allows for both text-based and graphical interface simultaneously using multiple observers.

Personal Website *HTML, CSS* — **hosny.ca**
A modern minimalist website featuring R Markdown/LaTeX notes for courses completed at UW.

Maze Generation *C++*
A terminal-based maze generator to visualize recursive backtracking algorithm for maze generation.

ACHIEVEMENTS

Waterloo Euclid Senior Mathematics Contest - Distinction — University of Waterloo

Waterloo Senior Canadian Computing Contest - Distinction — University of Waterloo

Cyber Patriot National Medalists — Air Force Association Cyber Patriot
Achieved silver medal as a team in the Canadian cyber security competition finals.

CERTIFICATIONS

CPA - C++ Certified Associate Programmer Certification — C++ Institute
Object-oriented model and its implementation in C++. — Jan 2018

SAS - Certified Base Programmer for SAS 9 — SAS®
Manipulate/transform data, combine SAS data sets, summary reports using SAS procedures. — Jun 2018

EDUCATION

University of Waterloo — Waterloo, ON
BCS Computer Science - Cumulative GPA: 91% (3.94/4.0) | Major (CS) GPA: 94% — 2019 to 2023
- President's Gold Scholarship - Admission scholarship $4,000