## Ali Al Shammaa

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## AliAlShammaa

#### UW BCS 1B STUDENT

## SOFTWARE SKILLS

- Languages: JavaScript, TypeScript, Python, Java & Racket.
- Web development : React, Angular, Firebase & Express.js.
- Tools: Git, BootStrap & FontAwsome. Tkinter & Selenium (Python).

## WORK EXPERIENCE

#### 1. Frontend Web Developer @ Atlas365

Jul - Sep 2020

- Enhanced **5+ major components** in an **Angular** website that increased **user satisfaction**.
- Updated **8 error-handling components** to ensure that the website is **robust and bug-free**.
- Enhanced the code's quality by refactoring and introducing linting/formatting to **increase team productivity**.

### 2. Platform Bot developer @ Game Pill

Jun - Nov 2020

- Designed 4 Bots (at request) for 3 social media platforms and included a GUI in Python using Tkinter
  & Selenium which helped connect to many beta pro-gamers and added ~20 followers each run.
- Used **OOP** to enhance the maintainability and development of the software.

#### 3. Research Assistant @ LiTrans Lab - Ryerson University

Aug - Sep 2019

• Enhanced the photorealistic aspects of a VR simulation in Unity3D to **improve reaction accuracy** of the subjects in an experiment.

# PERSONAL PROJECTS

#### 1. Personal Website www.alialshammaa.me

• Developed the website using **React** and related technologies. (See site for more details)

## 2. Express.js backend App

• Implemented REST API in Express.js

# 3. MyReact WebApp https://learn-react-c0991.web.app/

- Developed the website using React, React Router, Firebase, Axios, BootStrap and FontAwsome.
- Implemented **API** calls and fetched data with and without **Axios**.
- Used **React** hooks to present the data returned from API.

#### 4. ChessML chess engine

- Implemented a Chess engine using a **Minimax Algorithm** enhanced with **AlphaBeta pruning**.
- Integrated the following solutions to improve **pruning**: **HashTables with Zobrist Hashing**, **Iterative deepening framework**, KillerMove heuristics and move reordering.

## **5. PassGENIE** password generator

- programmed a password generator based on input by the user in **Python using procedural programming**.
- Written in **Python** with a **Tkinter-based UI** and an authorisation system.

## **EDUCATION**

• UWaterloo - Bachelor Of Computer Science Student : 92 % GPA & 94% Math GPA in 1A