# Christopher McGale Last Updated on 4th May 2021

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## **EDUCATION**

#### **UNIVERSITY OF WATERLOO**

BACHELOR OF COMPUTER SCIENCE Sep 2018 - April 2023 | Waterloo, ON

#### WILFRID LAURIER UNIVERSITY

BACHELORS OF BUSINESS ADMINISTRATION

Sep 2018 - April 2023 | Waterloo, ON

# **COURSEWORK**

#### **UNDERGRADUATE**

Object Oriented Software Development Computer Organization and Design Optimization

Data structure and Data Management Operating Systems

Advanced Algorithm Design and Analysis Financial Management and Equity Analysis

Financial Statement and Tax Form Preparation

Statistical and Economic Analysis Marketing and Human Resource practices

### SKILLS

#### PROGRAMMING LANGUAGES

Proficient in:

C++ • Python3 • Javascript(ES6)

• C • HTML • CSS

Familiar With:

Java • Shell • Latex

Web Frameworks

React.is • ¡Query • Node.is

Other Frameworks, Libraries, Tools and Platforms

AWS • Heroku • Linux

Git • Keras • Wix

**DataBases** 

MySQL • DynamoDB

#### **WORK EXPERIENCE**

#### **CPA CANADA** I INTERN

Jan 2020 - Apr 2020 | Toronto, ON

- Organized and optimized databases and employee and other statistics
- Worked under principals of multiple departments
- Researched a wide range of cross regional accounting standards for use by principals
- Prepared presentations and documents summarizing info from databases and research

#### **CITY OF TORONTO** | Pool in Charge

June 2014 - Sep 2014 | Toronto ON

- Led teams of 2 8 coworkers in both life-guarding instructing situations
- Organized and added to databases containing patron and pool chemical statistics
- Constant public relation management
- Worked under high stress medical and facility emergencies

# TECHNICAL PROJECTS

# **OBJECT ORIENTED IMPLEMENTATION OF CHESS** | SCHOOL PROJECT

Final project. Group project (3 members) written in c++, coordinated and hosted on Github. UML and design document prepared. Employed smart pointers, the observer and the strategy design patterns. Achieved a grade of 94%.

# KERAS DEEP LEARNING HANDWRITTEN EQUATION SOLVER | Personal Project

Uses the canvas element to accept numbers and operators as input which is then processed by a Keras neural network and appended to an equation. Once the user asks to solve, the string is converted to a DFA and parsing errors are screened; if the equation was valid, an answer is computed and displayed. Back end written in node.js and C++. Front End written in Javascript, html, css.

#### SNAKE BROWSER GAME | PERSONAL PROJECT

Simple browser game written in html, javascript and css. Implementation of the classic snake game, added multiple enhancements to both colour and speed.

#### PUPPETEER FINANCIAL WEB SCRAPE | PERSONAL PROJECT

#### **HUFFMAN ENCODE AND DECODE** | School Project

Written in C++. encode.cpp takes any English text and returns both the Huffman tree and the encrypted text. decode.cpp takes the output from encode.cpp and returns the initial text. Achieved a grade of 100%.