# Christopher McGale

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# **EDUCATION**

#### **UNIVERSITY OF WATERLOO**

BACHELORS OF COMPUTER SCIENCE Jan 2020 - Apr 2020 | Toronto, ON 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 Equity and Financial Analysis

Linear Programming

Combinatorics and Optimization Compilers and Assembly Language

## SKILLS

#### PROGRAMMING LANGUAGES

Proficient in:

C++ • Python3 • Javascript(ES6)

C • HTML • CSS

Familiar With:

Java • Shell • Latex • R

#### **WEB FRAMEWORKS**

React.is • Node.is • Express • Vue.is **OTHER** 

AWS • Heroku • Linux

Git • Keras • Wix • MS office

Valgrind • gdb • OOP

Functional Programming • MS Excel

## WORK FXPFRIENCE

#### CPA CANADA | INTERN

- Collaborated with multiple departments while using agile development practices
- Researched a wide range of cross regional accounting standards
- Prepared presentations, documents and excel spreadsheets summarizing and analyzing info from databases and research

#### CITY OF TORONTO | LIFEGUARD | POOL IN CHARGE

September 2016 - April 2019 | April 2019 - Jan 2020 | Toronto, ON

- Managed teams of 2 8 coworkers in both routine and emergency situations
- Analysis and reporting of chemical and patron statistics
- Constant public relation management

## TECHNICAL PROJECTS

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

Final group project (3 members) written in C++, coordinated and hosted on Github. Includes UML and design document. Employed smart pointers, the Observer and the Strategy design patterns. Achieved a grade of 94%.

#### PUPPETEER FINANCIAL WEB SCRAPE | Personal Project

Accesses and performs simple operations on a large number of equities to determine whether they satisfy Benjamin Graham's 7 criteria. Back-end written in Python, Front-end written with Vue.js. Scrapper written in node.js using the puppeteer library.

### SNAKE BROWSER GAME | PERSONAL PROJECT

Simple browser game written in HTML, JS and CSS. Implementation of the classic snake game, added multiple enhancements to both colour and speed.

#### **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%.

#### AI REAL ESTATE | TEAM PROJECT

Gathers data on recently sold properties through puppeteer. Uses Keras neural network to create predictions of selling price for property from user input. Deployed here.

# DISTINCTIONS

**DECA PROVINCIALS** | 2017, 2018 | FINANCE DIVISION

**OFSSA** | 2016, 2018

GRADE 12 IB CALCULUS AWARD | 2018

IB DIPLOMA AND 4 YEAR FRENCH CERTIFICATE | MICHEAL POWER ST. JOSEPH

## **VOCATIONAL WORK**

ICE BREAKER AND LIBC COUNSELLOR | WILFIRID LAURIER UNIVERSITY | 2019, 2020

WATERLOO ROBOTICS | 2020 - PRESENT

CAMP OLYMPIA LEADERSHIP CLUB | 2017-2018