

# ANDY REN

Candidate for BAsC in Computer Engineering at the University of Waterloo, Class of 2023

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## EXPERIENCE

### Web Analyst

#### Agriculture and Agri-Food Canada (AAFC)

January 2019 – April 2019

Ottawa, Canada

- Developed innovative web solutions using **JavaScript**, **HTML** and **CSS** for intra-departmental clients on the AAFC **SharePoint** platform
- Constructed string object search/scrape methods in **PowerShell** with use of the **SharePoint API** to increase functionality for a back-end script that generates a monthly report on departmental **SharePoint** usage statistics
- Communicated with clients regularly to build practical, maintainable solutions, and ensured that sensitive information was properly handled per government policy

### Student Senator

#### Ottawa Carleton District School Board

August 2017 – August 2018

Ottawa, Canada

- Elected to represent the interests of **1,200 high school students** at the **school board** and **parent council** level
- Helped plan and execute a comprehensive board-wide symposium on graduate exit outcomes, based on the OCDSB 2015-2019 Strategic Plan
- Assisted in the integration of a school-wide mental health initiative named the **"Butterfly Effect"** involving 1000+ students and staff incorporating OCDSB graduate exit outcomes
- Served as a student stakeholder on the **Committee of the Whole**

## PROJECTS

### Polynomial Calculator

[github.com/terraglacium/polycalc.js](https://github.com/terraglacium/polycalc.js)



- Built a calculator that converts string polynomials into object properties usable for polynomial operations (i.e add, multiply, differentiation, integration) by a set of **JavaScript** scripts.
- Utilized **Node.js** framework and **npm** libraries to emulate a CLI user interface

### CareerCounsel

[github.com/liaocanada/cuhacking-app](https://github.com/liaocanada/cuhacking-app)

CUHacking 2019

- Developed a **ReactJS** web application for CUHacking 2019 that retrieves **Indeed** listings using a **JSON string parsing/scraping algorithm** that summarizes job postings based on user inputted search parameters
- Built an express.js server using **node.js** framework to enable server-side script execution and CORS

## SUMMARY

- Proficient experience with functional scripting and programming languages (i.e. **JavaScript**, **C++**, **PowerShell**)
- Interest in embedded systems, Internet of Things, and biotechnology

## SKILLS

### Languages

C

C++

JavaScript

PowerShell

### Frameworks and Tools

Eclipse

ReactJS

node.js

JQuery

SharePoint

LaTeX

- Presently learning to develop and optimize various types of data structures and algorithms

## ACTIVITIES AND SOCIETIES



### ECE Academic Representative

Elected to represent engineering cohort twice as a First-Year **Academic Representative**



### Lifelong Musician

Played **Piano**, **Alto Saxophone**, and **Mallet Percussion** throughout primary and high school

## AWARDS

### Walrus Award

#### Earl of March Secondary School

June 2018

- Awarded to the student who, over the years at the school, has made an important, continual, and perhaps often unseen contribution to the school community