

# ANDY REN

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

@ andy.ren@uwaterloo.ca

519-404-5869

andyren.me

linkedin.com/in/andy-ren

github.com/ren-andy

## EXPERIENCE

### Software Developer

#### VirtaMove

September 2019 – Present

Kanata, Canada

- Designed and implemented new features and user interface behavior for VirtaMove core products using C# and the .NET Framework
- Constructed reusable error handling methods which mitigated software race conditions using C++, WinAPI and the WiX Toolset

### 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 search/scrape methods in PowerShell with use of the SharePoint API to increase functionality for a back-end script that populates 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 the Access to Information Act and Privacy Act

## PERSONAL PROJECTS

### CareerCounsel

#### github.com/liaocanada/cuhacking-app

February 2019

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

### Polynomial Calculator

#### github.com/terraglacium/polycalc.js

February 2019

- Built a calculator that converts string polynomials of the nth power into instances of objects 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

## SUMMARY

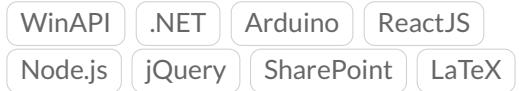
- Proficient experience with functional scripting and programming languages (i.e. Python, JavaScript, C++, PowerShell)
- Practical experience with micro-controllers and integrated circuit design (i.e. Arduino, VHDL)
- Interest in embedded systems, healthcare, Internet of Things, and biotechnology

## SKILLS

### Languages



### Frameworks and Tools



## 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