

RAY NIE

Highly motivated and teamwork-driven individual, fueled by solving high-impact problems and learning from others

PROGRAMMING

- JavaScript
- C++
- Python
- Java
- PHP
- C#
- Bash

TECHNOLOGIES

- Android Studio
- Unity
- Qt
- Raspberry Pi
- Docker
- Azure
- Node.js
- SQL
- Git
- React
- AWS
- Android Studio

EDUCATION

University Of Waterloo

FROM SEP 2014 - DEC 2019 (Expected)

- Pursuing a Combinatorics & Optimization and Computer Science double major
- Relevant Courses Include: Data Structures, Algorithms, Machine Learning, Numeric Computation, Statistics

E - LEARNING

- Intro to Machine Learning (Coursera)
- Deep Learning Specialization (Coursera)
- Learning C# by Developing Games with Unity (Udemy)

HOBBIES

- Piano (Level 10 RCM Certified)
- Badminton (TDSB Regional Champion)
- Waterloo Breakdancers (Executive Member)

CONTACT

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EXPERIENCE

IBM | FROM JAN 2018 - APR 2018

Cognitive Developer Intern for Watson Advanced Analytics

- Developed a full-stack web application for the Goldcorp machine vision highlight project using **Node.js** and **ReactJS**
- Applied natural language processing techniques (Word2Vec, TF-IDF, SpaCy, FastText) to categorize and analyze user comments
- Created web scraping tool to download ASTER satellite images of any specified region using **Python's** Beautiful Soup package

Ctrl V Inc. | FROM MAY 2017 - AUG 2017

Software Developer Intern

- Lead the development of an arcade management system using **C++** which is now used at over 20 Ctrl V locations and licensed by IMAX and Cineplex
- Implemented API endpoints using the **Node.js** Express framework for booking and arcade management
- Designed the booking software database and created the front-end using **React**

PerkinElmer Labs | FROM SEP 2016 - DEC 2016

Software Developer Intern

- Prototyped an IoT project creating an app that uses the MQTT protocol to communicate with a **Raspberry Pi**, allowing scientists to control and monitor lab instruments remotely
- Created a predictive maintenance machine learning application using **Microsoft Azure** Machine Learning Studio and Rapidminer

Ontario Lottery & Gaming Corporation | FROM JAN 2016 - APR 2016

Web Developer Intern

- Reduced company costs by developing a WordPress plugin in **PHP** that helped manage the board of director's expenses
- Designed promotional webpages on the official website that helped showcase OLG's new games and services

PROJECTS

Sorcery | FROM JAN 2017 - MAR 2017

Object Oriented Programming Project

- Developed a 2D fighting game using **Unity** and **C#** in a team of 5 people
- Worked on character attacks, level generation and audio related scripts

Bender Blaster | MAR 2017

1st Place - GI Game Jam

- Developed a card game similar to "Magic: The Gathering" in **C++** applying OOP practices and design patterns such as the decorator and iterator pattern

Text Finder | JAN 2017

Finalist out of 60 teams at University of Toronto Hacks III

- Implemented an optical character recognition application using **Android Studio (Java)**, and Google's Tesseract OCR to detect search phrases