

# IAN HU

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## Skills

### LANGUAGE

Go

VBScript

JavaScript

SQL

CSS

Java

C++

C

Scala

### FRAMEWORK & LIBRARY

ASP

jQuery

Node.js

Sass

Bootstrap

Jekyll

### DATABASE

Microsoft SQL Server

PostgreSQL

### OTHER

Git

IIS

Bash

Heroku

UML

## Education

University of Waterloo

Software Engineering

92.3% · 3.92 CGPA

Dean's Honor List

## Work Experience

### Ivy Global · Software Engineer

Toronto, Canada · Feb 2016 - Present

- Implemented a personalized study plan feature which determined a student's weakness, strength, and performance relative to the general population in terms of multiple areas by analyzing over 7 million student question responses
- Created an automatic essay grading and feedback tool utilizing **Machine Learning** as well as **Natural Language Processing** algorithms and researches
- Designed, implemented, and maintained an online test-taking tool and editing tool entirely from scratch
- Developed a central login system utilizing **OAuth 2.0** which is compatible across all Ivy Global services and apps
- Managed and trained a team of engineers with the development and maintenance of existing projects
- Prepared and carried out presentations about designs and projects to management and potential investors

## Awards

### Bronze Medalist · Canadian Computing Olympiad

May 2015

Competed in prestigious algorithm competition for the Top 20 high school students in Canada

### Top 20 · Canadian Computing Competition (Senior)

Feb 2015

Across all high school students in Canada

### First Place (Perfect Score) · Canadian Computing Competition (Junior)

Feb 2014

Across all high school students in Canada

## Projects

### GoGoGo

Jul 2016 - Present

- An online multiplayer implementation of the ancient board game Go, written in **Go** and **React.js**
- Implemented move validation and processing algorithms for the game
- Created unit tests for the server using Go's Testing package

### WatProduct

Jan 2016 - Present

- A website built with **Node.js**, express, and jade, which uses the Watson news and language analytics API to calculate popularity and reception of products

### Tetromino Simulator

Oct 2015 - Dec 2015

- Tetris game developed using Processing, a variation of **Java**, controlled using the Launchpad microcontroller
- Developed a serial communication protocol between the computer and the microcontroller
- Implemented Tetris graphics and game logics in modular and maintainable ways

### Mayo

Oct 2015 - Dec 2015

- Gesture-controlled painting software developed in **Java** using the **Myo** armband and its library

### Oniregnod Adventure

Nov 2014 - Jan 2015

- 2D turn-based strategy game developed using **Java** and Lightweight Java Game Library
- Implemented an AI system using concepts from game theories, such as Minimax
- Designed UML diagram using object-oriented design principles