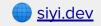
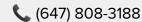
# **BILL SIYI LIU**









### COMPUTER ENGINEERING STUDENT

## **EXPERIENCE**

### WEB DEVELOPER // TREASURY BOARD OF CANADA

// JAN - APR 2020

- > Front-end web app development using React, JS, SCSS, JSON, YAML
- > Helped create data visualization tools for public use
- > Used Lodash for data manipulation and D3 for certain visualizations
- > Created back-end communication with MongoDB using Mongoose

### **DEVELOPER INTERN** // **EDSBY** // FEB - JUN 2018

- > Worked with python database scripts
- > Tested servers and maintenance status
- > Identified and resolved bugs on product
- > Conducted quality assurance assessments

## DATA ANALYST INTERN // <u>DECISION RESOURCES</u>

**GROUP** // JUL - AUG 2017

- > Worked with live data sets from the healthcare industry
- > Utilized SQL and R for database manipulation and statistical computing
- > Performed market tracking and price tracking

### STUDENT TRUSTEE // YORK REGION DISTRICT **SCHOOL BOARD** // AUG 2018 - JUL 2019

- > Elected by the 132,000 students of York Region DSB
- > Provided integral input on policy, curriculum, budget, and programs
- > Created suggestion publishment for the Ontario Ministry of Education
- > Directed board wide events, meetings, and seminars

## **PROJECTS**

https://devpost.com/bill-lliu/ https://github.com/bill-lliu/

### COMPOSER COMPANION // TORONTO HACKS II

- > A machine learning web app that composed music by remixing scores
- > Used Tensorflow to create a new score through a recurrent neural network
- > Algorithm used Long Short Term Memory to emulate human creativity

### **HACKER HUNTER** // MHACKS 11

- > A modern twist on the classic game "Assassins" on mobile devices
- > Used Near-Field Communication (NFC) to relay game info in real time
- > Used Google Firebase for backend and Twilio API for text communication

## **SUGAR<sup>3</sup> // PENNAPPS XVIII**

- > An iOS diet journal app that showed nutrition quantities in augmented reality
- > Scanned barcodes of processed food items add to a tracking journal, relay nutrition amounts through Nutritionix, and constructs 3D models using AR Kit

#### CARNIVAL - HIGH SCHOOL STUDENT COUNCIL

- > Director role orchestrating an event for 1800+ students
- > Optimized QR code ticketing system and streamlined event coat checks
- > Developed non-conflicting schedules for 60+ volunteers and staff
- > Organized rides, food trucks, DJs, club activities, and full event layout

## **SKILLS**

#### **LANGUAGES**

Javascript // Java // C++ // Python // HTML // (S)CSS // mySQL // R

### **FRAMEWORKS**

React // Lodash // MongoDB // Firebase // Android Studio // Excel

## **EDUCATION**

#### UNIVERSITY OF WATERLOO

> Candidate for Bachelor's of Applied Science in Honours Computer Engineering, Coop

### RICHMOND HILL HIGH SCHOOL

- > Valedictorian of graduated class of 400 students
- > Graduated with Specialist High Skills Major in Information Technology
- > AP Scholar, completed 11 AP Exams

## **AWARDS**

### UNIVERSITY OF TORONTO OPERATIONS **RESEARCH COMPETITION // 2018**

- > Third Place out of two hundred delegates
- > Created most efficient travelling salesman algorithm utilizing Prim's Algorithm

#### **UNIVERSITY OF WATERLOO**

- > Distinction in Canadian Computing Challenge (S)
- > Pascal/Galois/Fryer school champion, Pascal gold medalist with perfect score

### MARKHAM ANNUAL YOUTH PITCH IT CONFERENCE // 2018

- > First Place and Best Overall Business
- > Created a functional app to Google search using text messages without the use of mobile data

## INTERESTS

- > TEDx Talk on improving sleep // 2019
- > TEDx Talk on self-inducing positive chemicals // 2018
- > Hosted Lunarhacks, Mentored at Urbanhacks and Lunarhacks
- > Executive member on Comp Sci & Robotics // 2015 2019 > Elected member on Student Council // 2015 - 2019
- Cursor Club // 2017 2020 // L.I.G.H.T. Org // 2016 2018 // YN Alliance Org // 2016 - 2018 // Alpine Ski Team // 2017 - 2019
- > SHAD Waterloo Alumni // 2017