

# Yash Arora

SOFTWARE ENGINEERING STUDENT · UNIVERSITY OF WATERLOO

☎ (+1) 647-575-4096 | ✉ YashArora0606@gmail.com | 🏠 yasharora.com | 📷 YashArora0606 | 🌐 YashArora0606

## Skills

<b>Languages</b>	Python, Java, C, C++, JavaScript, C#, HTML5, CSS3, SQL
<b>Frameworks</b>	Node.js, Matplotlib, p5.js, Processing.js, ARKit, Arduino, RobotC, Bootstrap
<b>Machine Learning/DS</b>	Google Cloud Vision, Wolfram NLP, AutoML, TensorFlow, Hadoop
<b>Tools/Platforms</b>	GitHub, GitLab, Linux, Raspberry Pi, Unity, Software Engineering Tools (Violet UML, Gantt, Pert)

## Experience

### Software Development Intern

Toronto, ON

HATCH CANADA

Jan 2019 - June 2019

- Created **prototypes** for a framework that managed how coding hints were organized and delivered to users in **Python**.
- Automated a system that delegated "skill" attributes to problems based on sample solutions, allowing users to query the problem database by competency and saving about **\$10 000**.
- Used **processing.js** and **p5.js** to code solutions and documentation to practice problems for over **35 900** students.

### Back-End Developer

Richmond Hill, ON

EXPERTMATH TUTORS

June 2018 - May 2019

- Developed a **Java** program that automatically coordinated scheduling and anticipated finances.
- Eliminating the need for manual scheduling and allowing tutors to track expected income.
- Coded/maintained [www.expertmath.ca](http://www.expertmath.ca) using **HTML5**, **CSS3**, and Bootstrap, and managed hosting with cPanel.

### Student Web Developer

Richmond Hill, ON

RHHS STUDENT COUNCIL

Sept 2018 - June 2019

- Programmed a **QR-Code sign-in system** which automated guest entry during events with over **2000** attendees.
- Coded a desktop application in **Java** that automated the scheduling of sporting activities such as tournaments.
- Developed and maintained [www.rhhsstuco.ca](http://www.rhhsstuco.ca) using **HTML5**, **CSS3**, Bootstrap, and **Javascript**.

## Projects

### Thing

Toronto Hacks 2

- SMS based **virtual assistant** that allows users to access information from the internet without WiFi/mobile data.
- Uses **natural language processing** to determine succinct responses to queries, optimizing response time.
- Built in **Node.js** using Wolfram Alpha, Twitter, Google Maps, Google News, Smmry, OpenWeatherMap, and Twilio APIs.

### Vysion

Electric City Hacks

- **Visual recognition** project designed to assist those with visual impairments through the use of **machine learning**.
- Built in **Node.js** with Google Cloud Vision, AutoML, Clarifai, and OpenCV.
- Determines users' surroundings and reads out relevant text, objects, and environments from various **ML databases**.

### Murmur

Software Engineering 101

- **Python** project that triangulates sounds over time to generate heat-maps and find quiet locations in buildings.
- Performs sound analysis on NumPy data obtained from **Raspberry Pi** modules, and uses **amplitude-based vector addition** to determine the positions of the sounds.

### Leonardo

Hack the North 2018

- **Data analysis** application that allows companies to find ideal locations for their businesses from transaction data.
- Uses Hotelling's Principle to suggest locations with similar transaction activity as the desired business.
- Built in **Node.js** using the TD Da Vinci API at **Hack the North 2018**.

## Education

### University of Waterloo

Waterloo, ON

CANDIDATE FOR BACHELOR OF SOFTWARE ENGINEERING (HONOURS)

Sept 2019 - Apr 2024

## Achievements

2018	<b>International Finalist</b> , DECA International Career Development Conference	Atlanta, GA, U.S.A
2018	<b>First Place</b> , PLYC "Pitch It!" Pitch Competition	Markham, ON, CA
2018	<b>SHAD Fellow</b> , SHAD Canada	Ottawa, ON, CA
2017	<b>First Place + Grand Prize</b> , RBC #FutureMaker Innovation Award, Toronto Hacks 2	Toronto, ON, CA
2017	<b>WolframOne Award</b> , Electric City Hacks	Peterborough, ON, CA