# Yash **Arora**

SOFTWARE ENGINEERING STUDENT · UNIVERSITY OF WATERLOO

(+1) 647-575-4096 | YashArora0606@gmail.com | yasharora.com | YashArora0606 | YashArora0606

## Skills

| | |
|---|---|
| **Languages** | Python, Java, C, C++, JavaScript, C#, HTML5, CSS3, SQL |
| **Frameworks** | Node.js, Matplotlib, p5.js, Processing.js, ARKit, Arduino, RobotC, Bootstrap |
| **Machine Learning/DS** | Google Cloud Vision, Wolfram NLP, AutoML, TensorFlow, Hadoop |
| **Tools/Platforms** | 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.
- Eliminated the need for manual scheduling and allowing tutors to track expected income.
- Coded/maintained 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 using **HTML5**, **CSS3**, Bootstrap, and **Javascript**.

## Projects

### Thinq
*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

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