

# Justin Goping

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Undergrad Computer Science | #20710116 | 647-202-0920 | [jngoping@uwaterloo.ca](mailto:jngoping@uwaterloo.ca) | justingoping.com

## Software Development Skills

- Proficient with Python (1.5 years), Turing (2 years), and Racket (4 months), competent with Java (6 months)
- Experience with creating Android apps in spare time using Android Studio, Java, and XML
- Understanding of HTML, CSS, and Javascript from self-learning and creating a personal website
- Developed leadership and communication skills throughout projects and work experience

## Projects

### OrigamiIT | Hack the North 2017

- Created an Android App using Watson Image Recognition API to identify the subject of a given photo
- Wrote Java code to parse the JSON output and feed it to an origami-instruction database
- Gained experience with Android Studio development, working with/coordinating with a small team, and planning out a full product

### Hobby Video Games

- Designed a two-player game where players can move around as squares and shoot bullets to tag each other using gamecube controllers
- Constructed an Android game using the accelerometer to tilt a chicken around the screen to goal zones
- First-person game in which a player walks around my basement looking for a randomly hidden stuffed monkey, created based on a directed graph
- Acquired experience with Python/Android Studio/Turing game libraries, game development, various hardware such as sensors and controllers, and writing programs running with real-time interaction

## Work Experience

### Software Engineering Intern | Laborie Medical Technologies | July 2017 - August 2017

- Sourced and evaluated various Java-compatible 3D plotting libraries to use for a new acoustic measurement device to make the data easier to interpret for doctors
- Implemented the Jzy3d library into a proof of concept prototype which included integrating the new real-time 3D rendering functions
- Built and optimized efficiency of real-time weighted moving average filter with user-adjustable controls using a queue to prevent delay in the graphics

### Teacher | Ebots Robotics | September 2016 - May 2017

- Gained leadership skills through role as a teacher for children from grades 2-3
- Developed communication skills by teaching concepts of simple machines through the usage of interesting Lego builds

### Musician | Merriam School of Music | September 2016 - April 2017

- Boosted teamwork skills through playing bass guitar in an accompaniment band
- Adaptability gained by playing gigs around Ontario, such as at a New Year's celebration for the Mayor of Toronto

## Achievements

- 3<sup>rd</sup> place at MasseyHacks III | 2017
- 3<sup>rd</sup> place in the "Tech Under 20 Cup" | 2017
- Qualified and attended in FLL and VEX world-level robotics championship | 2013-2017

## Education

- Candidate for Bachelor of Computer Science | 2017-2022 | University of Waterloo, Waterloo ON