Justin Goping

Undergrad Computer Science | #20710116 | 647-202-0920 | jngoping@uwaterloo.ca | justingoping.com

Software Development Skills

- Proficient with Python, Turing, and Racket; competent with Java; basic familiarity with C, C++, and Ruby
- Experience with creating Android apps in spare time using Android Studio
- Learned to use HTML, CSS, and Javascript from self-learning and creating a personal website
- Learned fundamentals at an early age from programming with the NXT 2.0 in the fourth grade at a robotics club
- Developed leadership and communication skills throughout projects and work experience

Projects

OrigamIT | 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 and working with a small team throughout the Hackathon as we had to work very efficiently to create the final product in the given timespan

Hobby Video Games
- Constructed an Android game using the accelerometer to tilt a chicken around the screen to goal zones
- Designed a two-player game using gamecube controllers where players can move around as squares and shoot bullets to tag each other
- Developed a first-person game with a map system based on an undirected graph in which the player walks around my basement looking for a randomly hidden stuffed monkey
- Acquired experience with writing programs running with real-time interaction from a rhythm game I built as the notes needed to sync with the music and there could not be delay on the player's input

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 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
- Adapability gained by playing gigs around Ontario, such as at a New Year's celebration for the Mayor of Toronto

Achievements

- 3rd place at MasseyHacks III, a Hackathon with ~300 students competing | 2017
- 3rd place in the 'Tech Under 20 Cup", a competition to create and pitch a product | 2017
- Qualified and attended in FLL and VEX world-level robotics championship | 2013-2017

Education

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