# **TONY LIANG**

## SOFTWARE ENGINEERING







#### **SKILLS**

- Proficient: Java, C, HTML5, CSS and C++
- Familiar: JavaScript, XML
- Tools: Bootstrap, Vim, Android Studio, Energia
- Experience developing web, Android and Arduino apps

## **PROJECTS**

Personal Website - Web Development (https://github.com/T-TonyLiang/T-TonyLiang.github.io)

Jan. 2015 – Present

- Created a mobile-friendly website with HTML, CSS and the Bootstrap framework
- · Designed website layout, added and customized visual elements

**Circles – Android Application** (https://github.com/jerryliu55/Circles)

Nov. 2015 - Present

- Developed an Android game for Hack Western II using knowledge of Java and XML
- Implemented game logic, behaviour and simple physics engine
- Created graphics using Canvas and Paint libraries to properly display all game elements
- Designed code for future scalability through OOP principles

**Land Battle Chess – Java, OOP** (https://github.com/T-TonyLiang/Land-Battle-Chess)

Oct. 2014 - Apr. 2015

- Developed chess board game using Java, OOP, linked lists, and stacks
- Utilized effective unit testing to ensure product adheres to original game rules
- Leveraged exception handling for run time errors and display using Swing class
- Documented code using Javadoc as well as development process (planning, techniques, evaluation)

**Orbit Game – Arduino** (https://github.com/T-TonyLiang/orbit-Game)

Oct. 2015 - Dec. 2015

- Built an obstacle dodging game on a microcontroller board using C and the Energia IDE
- Interfaced with the C and Arduino hardware APIs to work with buttons, switches and accelerometer
- Designed and implemented obstacles with increasing difficulty, graphics, and score system

### **WORK EXPERIENCE**

**Summer Camp Coordinator**, Markham Free Methodist Church, Toronto, ON **Assistant Tutor**, Kumon Inc., Toronto, ON

May 2015 – Aug. 2015

Jun. 2014 – Jan. 2015

**EDUCATION** 

**Candidate for Bachelors of Software Engineering**, Class of 2020

Sep. 2015 – Present

University of Waterloo, Waterloo, Ontario

International Baccalaureate Programme (IB), High School Diploma

Sep. 2009 - May 2015

Victoria Park Collegiate Institute, North York, Ontario