# ETHAN LIANG String@uwaterloo.ca linkedin.com/in/ehliang

ehliang.com github.com/ehliang

#### TECHNICAL SKILLS

Languages: Java, Python, C++, C#, SQL

Web Development: node.js, Express, React, AngularJS 1 & 2, jQuery, webpack, SASS, CSS, HTML Tools: Git, Docker, maven, gradle, mySQL, AWS Lambda, AWS SQS, Espresso, JUnit, JMeter

#### **WORK EXPERIENCE**

#### **Application Developer**

Jan-May 2016

XE.com Inc.

- Developed for the XE Android app in Java and shipped the XE Android Wear app
- ▶ Engineered the Android app for partner company RIA Digital, deployed two-factor authentication to an ASP.net endpoint and implemented user session states



- Managed and developed the Currency Skill Project for the Amazon Echo on AWS lambda and built a new testing framework for the Alexa Voice Service with Java and node.js
- Prototyped an implementation of the XE Currency Data API in React with a node.js backend

#### **Lead Frontend Developer**

Sep 2014-May 2015

Prime Leaders of York Region

- Spearheaded the development of the main website using Bootstrap and jQuery
- Designed and built Firebase-linked AngularJS 1 module for a responsive mailing list



#### **PROJECTS**

Gitalytics *⊗* May 2016

- ▶ Constructed a **node.js** web platform to analyze public metrics from the GitHub API and generates statistics for employers to catch commit manipulators, minimal contributors and code plagiarists
- ▶ Performed initial tests on around 200 public profiles and 1400 public repositories
- Assembled a development team within startup incubator **Velocity** to bring Gitalytics to market

XpressCart *∂* Mar 2016

- ▶ Awarded best use of the Capital One Nessie API at PennApps XIII
- ▶ Developed **Android** app for self-checkout from smartphones using the ZXING and Nessie APIs
- > Validated purchased products through a weight sensor attached to an Arduino which communicated with the app through an NFC shield

LeapStacks *∂* Feb 2016

- ▶ Created a C# physics simulation in Unity with mobile blocks to introduce children to virtual space
- ▶ Deployed at **DeltaHacks II** using the Oculus Rift and Leap Motion Controller

#### **EXTRACURRICULAR**

### **Undergraduate Research Assistant**

May-Aug 2016

University of Waterloo Collaborative Systems Laboratory

- ▶ Researched motion mirroring to boost user engagement for large-scale interactive advertisements
- ▶ Generated anthropometric sensing algorithms in C# for Kinect

## **EDUCATION**

## University of Waterloo

- ▶ Candidate for B.ASc in Systems Design Engineering, Class of 2020
- ▶ Studied iterative design principles and acquired strong prototyping skills to build better products

## **ACTIVITIES AND INTERESTS**

Hackathons, marathon running, piloting prop planes, aerospace technology, indie music