# BRIAN HO SOFTWARE

ENGINEERING

■ briankyho@gmail.com

brianho.ca

**(**289) 380 9120

in nairboh

nairboh

### **Skills**

#### **LANGUAGES**

lava

C++

С

HTML/CSS

Python

JS

# FRAMEWORKS & LIBRARIES

Android

Butterknife

Dagger2

Retrofit

RxJava2

Jenkins8

Firebase

JUnit

OpenGLES 2.0

Qt

Swing

#### **TOOLS**

Git

Android Studio

SVN

### **Education**

University of Waterloo Candidate for Bachelor of Software Engineering 2020

### **Employment**

XE.com Inc.
Software Developer

Newmarket, ON Jan 2017 to May 2017

- Contributed to app redesign to replace XE Currency app (> 5 million installs) on Play Store
- Utilized various third party libraries for app redesign structure and testing (**Dagger2** for dependency injection, **Butterknife** for resources, **RxJava** and **Retrofit2** for asynchronous retrieval and mapping of data)
- Migrated RateAlerts (**Firebase Cloud Messaging**) into its own Android resource library and integrated into app redesign
- Assisted with implementing Firebase App Indexing and Deep Linking in existing app
- Improved layouts in existing app and implemented **recyclerview** with search, swipe and move gestures in the redesign

## Epson Canada Limited

Markham, ON

Apr 2016 to Aug 2016

Software Developer

Developed Android applications for Epson Moverio (augmented reality glasses)

- Developed Android applications for Epsort Moverlo (additional reality glasses)
- Solved UI hanging issues by implementing asynchronous loading of 3D models
- Utilized **OpenGL ES 2.0** to dynamically render a 3D refined icosahedron for object training and tracking based on user perspective and depth
- Designed UI and improved functionality for internal applications using Qt and C++
- · Demonstrated potential of glasses technology to foreign stakeholders and executives

# **Projects**

#### SuperAutomator

Jun 2013 to Current

- Java multi-threaded timer and MP3 player with UI designed using the Swing library
- Improved daily routine of high school administration staff by automatically playing the announcements and National Anthem since 2013

Mayo Oct 2015

- Painting program designed using the Java Swing Library that utilizes the Myo Armband's gesture capabilities
- Mapped gestures to the paint brush (changing colours, brush size) using Myo Java API

#### Tetromino Simulator

Oct 2015 to Dec 2015

• Tetris game developed using Java and controlled by an Arduino microcontroller

# Volunteering

#### FIRST Robotics, Team 4343 · Team Captain and Mentor

Sep 2011 to Current

- Implemented PID controller for various subsystems
- · Hosted open Java and object-oriented programming lectures to students

### **Awards**

University of Waterloo · President's Scholarship of Distinction Achieving higher than 95% admission average

Sep 2015

Town of Aurora · Scholarship

Jun 2015

Having the highest academic average of 97%

YSCPC · Leadership Award

May 2015

Award for having outstanding leadership in AV Tech Team and robotics in highschool