BRIAN HO

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Skills

LANGUAGES

Java
Kotlin
C++
C#
C
Python

FRAMEWORKS & LIBRARIES

Android
RxJava2
Dagger2
ButterKnife
Retrofit2/OkHttp
OpenGL ES 2.0
Qt
JUnit

TOOLS

Git
Android Studio

Education

UNIVERSITY OF WATERLOO

Candidate for Bachelor of Software Engineering
2015 to Current

Employment

SMART Technologies — Seattle, WA
Android Software Developer — Sep 2017 to Jan 2018
- Created and shipped feature to allow users to export document to USB for Whiteboard and Notebook Player on the SMART Board (Android touch panel)
- Utilized data binding to implement new views and dialogs, improved USB mounting logic to support multiple devices in aforementioned apps
- Solved critical dependency issue which increased stability and minimized crashes for Whiteboard app
- Created Whiteboard 2.0 prototype to merge and deprecate both Whiteboard and Notebook Player into one app
- Created a time scrollable video, audio, and JSON capture client prototype in C# for SMART RCC (A whiteboard collaboration tool designed for Foxconn)

XE.com Inc. — Newmarket, ON
Android Software Developer — Jan 2017 to May 2017
- Contributed to redesign for XE Currency app (> 50 million installs) on Play Store
- Utilized various third-party libraries for app redesign structure and testing (Dagger2 for dependency injection, Butter Knife for resources, RxJava2 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 in implementing Firebase App Indexing and Deep Linking in existing app
- Implemented recyclerview with search, swipe and move gestures in redesigned app

Epson Canada Limited — Markham, ON
Android Software Developer — Apr 2016 to Aug 2016
- Developed Android applications for Epson Moverio (augmented 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++

Projects

Avaloo (github.com/nairboh/avaloo)
- Online Kotlin (Android) multiplayer game, based on the board game Avalon
- Uses QRCode for game pairing and a combination of WebSockets and RxJava2 for asynchronous game event updates

CourseBot (github.com/nairboh/coursebot)
- Python Slack bot which retrieves data from University of Waterloo's API
- Displays course requisites, and enrolment information upon user request

SuperAutomator (github.com/nairboh/superautomator)
- Java Swing multi-threaded timer and MP3 player
- Improved daily routine of high school administration staff by automatically playing the announcements and National Anthem since 2013

Mayo (github.com/nairboh/mayo)
- Paint program designed with Java Swing, controlled by the Myo Armband
- Mapped Armband gestures for (changing colours, brush size) with Myo Java API

Volunteering

FIRST Robotics, Team 4343 · Programming Mentor — Sep 2011 to Current
St. Maximilian Kolbe Catholic High School