# **NEIL ARMAND BARADAS BANTOC**

# Creative Technologist // UX Engineer 408-887-4256 // neilbantoc@gmail.com // https://neilbantoc.github.io

# **Education**

## **Master in Human-Computer Interaction**

Carnegie Mellon University // 2016 - 2017 Pittsburgh, PA, USA

#### **Bachelor of Science in Computer Science**

University of the Philippines // 2008 - 2012 Los Banos, Laguna, PH

# **Tools and Skills**

#### Design

Sketch
InDesign
Illustrator
InVision

#### **Programming**

Android Studio IDE
Java, Android, JNI
Atom IDE
HTML, SASS, SVG
D3, JQuery
Jekyll, Github Pages
SQL
A/B Testing

# **Version Control**

Git, SVN Tower

#### **Prototyping**

Arduino/ESP8266 Foam Core Prototyping

#### Research

Contextual Inquiry
Affinity Diagram
Competitive Analysis
Personas
Crazy 8's
Interviews
Survey Design
Speed Dating
Wizard of Oz

# **Projects**

#### MHCI/Samsung Capstone Project: Improved Human-Robot Interaction

Uncovered issues with human-robot interaction in the context of the robotic vacuum cleaner and the home. Mocked up prototypes using an esp8266 wifi-enabled microcontroller and a Thymio robot to test ideas on improving communication.

# **Android App: Rise and Smile // Face Detection Powered Alarm Clock**

Created an alarm clock for Android that uses face detection to wake the user up by detecting and requiring their eyes to be kept open for a set amount of time.

# Service Design: Echo // A Service for Practicing Verbal Presentation Skills

Researched and designed an on-campus service that uses a combination of VR, speech recognition, and depth cameras to collect and analyze metrics that help engineering students improve their verbal communication and presentation skills.

## **IoT: Ambient Display for Incoming Buses**

Built an ambient display that uses an LED strip laid out to look like the streets of a map to show incoming buses around CMU's MHCI lab space. All API querying, JSON parsing, and distance computation was done on an esp8266 microcontroller.

# Dashboard Design/Data Visualization: A Tale of Two Greenlands

Created a dashboard using web technologies such as svg and d3.js to visualize biodiversity metrics for Greenland.

#### Android App: Freelancer Messenger // Instant Messaging + Rest Client App

Modernized the code for Freelancer.com's mobile messaging app for Android to use frameworks such as Dagger for dependency injection, Realm for persistent storage, Support Design Library for Material Design UI components, etc.

#### **Android App: iLike // Music Streaming App**

Built an HTTP Live Streaming based music streaming app for Android with support for offline playback through serving media chunks from an on-device HTTP server.

# **Employment**

## **Android Software Engineer // Freelancer.com Philippines**

June 2015 - Jul 2016 // Taguig City, Manila, PH

- Refactored parts of the app to use the Model-View-Presenter architecture
- Applied Unit Testing using JUnit and Mockito for presenters in the app
- Migrated dependency injection modules from Dagger 1 to Dagger 2
- Updated old code to use components from the Support Design Library
- Integrated Taplytics for A/B testing and Phabicator for peer to peer code review
- Worked under an Agile team

#### Senior Android Developer // Stratpoint Technologies, Inc

May 2012 - Apr 2015 // Mandaluyong City, Manila, PH

- Offered Android app development expertise to the company's top clients,
   Phunware Inc (a US-based mobile solutions provider) and Globe Telecom (one of the largest telecommunications providers in the Philippines)
- Gained extensive experience building Android clients that consume JSONformatted API web services
- Created a range of apps, from location based to music players to VOIP clients