

# CHOENDEN KYIRONG

## SOFTWARE ENGINEER

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An aspiring Computer Engineer and Computer Scientist with a strong passion for equal opportunity, quality of life development, and music.

## Skills

### PROGRAMMING

Java  
Python  
Arduino (C)  
Unity (C#)

### FRAMEWORKS

Django  
Flask  
Spark

### DATABASES

Firebase  
MySQL

### TOOLS

Android Studio  
Git  
SVN  
Google Cloud Platform  
Invision  
Marvel  
Sketch

### EXPERIENCE WITH

Android Development  
Web Development  
Facebook Chat Bot API  
Facebook Login API  
Twitter Search API  
RESTful Programming  
LAMP

## Education

### UNIVERSITY OF TORONTO (2014-2016)

Computer Science and Mathematics  
Undergraduate Coursework: Algorithm and Data Structures; OOP Software Design (Java); OO Programming (Python); Discrete Mathematics; Statistics for CS; Calculus I/II; Linear Algebra I; Psychology 100; Musical Theory and Analysis; Jazz Improvisation; Jazz/Musical Ear Training.

### COURSERA

Coursework: OOP Java (UCSD); Algorithms and Data Structures Specialization (UCSD); IoT and Embedded Systems (UCI); Arduino Platform and C Programming (UCI); Intro to Mathematical Thinking (Stanford); Intro to Philosophy (Uni. of Edinburgh).

## Employment

### UNIVERSITY HOSPITAL GEELONG - OBSTETRICS AND GYNAECOLOGY DEPT.

*Freelance - Android Developer*

An Android application that allows admin to add events for users to see. Users can then attend events and have to validate their attendance by entering a timed unique key. Admin can see and pull up who attended what events from the database. Technology: Java, Firebase, Android Studio, Invision.

Geelong, Australia  
Dec 2016 to Current

## Projects

### SOCIAL MEDIA ANALYZER

Full Stack Developer - Using the Twitter SDK to fetch related tweets on specific stocks and companies and applying sentiment analysis in Python using IBM's Alchemy Language API to create interesting predictions and connections. Built with: Java, Python, Android Studio, LAMP, Google Cloud Platform, Twitter Search API, IBM Alchemy Language API. Prototype built at: UoFT Hacks.

Jan 2016

### TERMINAL RE-CREATION

Developer - A re-creation of numerous terminal functionalities using fundamental OOP concepts, trees, recursion, stacks, hashes, Agile Methodologies amongst team members, SVN, and JUnit Testing. Software Used: Java

Mar 2016

### BRAINALYZE

Developer - This mobile application uses Muse hardware to collect EEG values from the cancer patient's brainwaves and displays their brain activity in real time. Allows users to see comparisons of EEG values to non cancer patients so they can continue to improve. Build with: Java, Muse, Android Studio. Prototype built at: SFU MedHacks

Sep 2016

### EMOTION BOT

Lead Developer - A Facebook chat bot built with Python, Django, Facebook Messenger Bot API, ngrok, and Sentigem API (Sentiment Analysis). This chat bot was built to cater to peoples emotional needs. One can get recommendations such as: music, movies, shopping, food and more based on emotional states. Also, a user can journal and get feedback on how their emotions are weekly. Prototype built at: Kingdom Hackathon

Nov 2016

## Awards

### Spotless IoT Hack at the G · 3RD PLACE FINALISTS AND PEOPLE'S CHOICE AWARD

Lead Software Developer - Built a chat bot using Python, Django, Facebook Messenger Bot API, Arduino, and ngrok. The chat bot was built to solve the problem of long queues during intermissions at food stalls by receiving information from sensors near lineups which tell users how long a line is, thus directing users to different food stalls. Also, allowing users to order food from the bot while in their seats which then shorten queues at stalls.

Nov 2016

### Immersive VR Hackathon · MOST LIKELY TO BE SUCCESSFUL STARTUP

Lead Software/Hardware Developer - Created a working prototype for a Virtual Reality keyboard using Unity, C#, circuits, sensors, and an Arduino.

Nov 2016

## Activities

### UTRA SUMOBOT COMPETITION · Software/Computer Engineer

Self driving car robot using infrared sensors, motors, wheels, and an Arduino. The robot has the ability to detect objects in front, push objects away, and avoid other cars.

Dec 2015 to Feb 2016

### UOFT HACKS, YALE HACKS, AND HACK PRINCETON · Developer

Participated at these hackathons where projects are built in a short time frame.

Winter 2016 to Spring 2016

### NATIONAL JAZZ BAND OF CANADA · Lead Trombone

Lead and Trombone soloist for the National Jazz Band of Canada. This select band made of the top musicians in Canada perform under the direction of Alex Dean. Sponsored by Conn-Selmer and performed in various places around Canada.

Mar 2012 to Mar 2012

## Volunteering

### STUDENTS FOR A FREE TIBET · Youth Volunteer

Vancouver, Canada

Students for a Free Tibet (SFT) works in solidarity with the Tibetan people in their struggle for freedom and independence. Our role is to empower and train youth as leaders through education in the worldwide movement for social justice.

Jun 2005 to Current