# SI TE FENG 3A Mechatronics Engineering

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# **SUMMARY OF QUALIFICATIONS**

- Languages:
  - o Proficient in Objective-C, C, C++, HTML, CSS
  - o Experienced with Swift, Matlab, Javascript, Python, Shell, MySQL
- <u>Tools/ Frameworks:</u> iOS SDK, Cocos2D, UIAutomation, XC Testing, Cucumber, JQuery, AngularJS, MongoDB, Git
- Software: Xcode 6, Eclipse, JIRA, Solidworks, AutoCAD 2013, NX Unigraphics, EAGLE, Adobe Photoshop, Microsoft Office, Apple iWork
- Electronics: Assembly, PLCs, Arduino Microcontroller, used various lab equipment and sensors

## WORK EXPERIENCE

iOS Developer

(Jan, 2015 - Apr, 2015)

Pebble Technology, Palo Alto, CA

- Developed new features for the Pebble Time iPhone app such as initial watch onboarding, My Pebble screen UI, calendar event synchronization, and audio endpoint
- Used ReactiveCocoa and Core Data with Objective-C and MVVM design pattern

iOS Developer

(May, 2014 - Aug, 2014)

Avoca Technologies Inc, Richmond Hill, ON

- Developed new features and enhanced existing features in the "myplayXplay" video tagging app
- Acquired experience in various APIs such as AVFoundation, Core Graphics, and Google Drive
- Written UIAutomation testing scripts with Javascript

# **Technical QA Analyst**

(Sep, 2013 - Dec, 2013)

Vitalhub Corp- Patient Care Evolved, Toronto, ON

- Gained practical knowledge in iOS development by implementing new iOS app features
- Written Agile stories for the new iOS app features using JIRA bug tracking software
- Written XC Unit Tests and Frank-Cucumber automated testing scripts on iOS

#### **Mechanical Research Assistant**

(Jan, 2013 - Apr, 2013)

Real-time Embedded Systems Lab, University of Waterloo, ON

- Designed and built a RC car conveyor system with adjustable speed and direction
- Acquired valuable experience in Solidworks and using machine shop equipment
- Designed and built devices for the lab including ball and beam balance and inverted pendulum

### **PROJECTS**

# Fusion Smartstrap

(April, 2015 – present)

- o A watch strap that adds wireless charging capability to the Pebble Time smartwatch and extends the battery life from 7 days to more than 40 days
- Created Solidworks models of the back casing and strap with battery compartments. Details can be found on Github or the website listed below

#### Personal Website

(May 16-18, 2015)

- o Website created with HTML, CSS, Bootstrap, and AngularJS
- o Currently available at <a href="http://sitefeng.github.io">http://sitefeng.github.io</a>

## MetroArm – Robotic Arm

(Feb, 2015)

- o Designed and built a 6 DOF servo actuated robotic arm controlled by an Arduino
- o Records hand motion through Leap Motion and translates to the robotic arm
- o Grand-prize winner of TreeHacks hackathon at Stanford University

# Uniq – College Info Reimagined

(Nov, 2013 - Nov, 2014)

- o Co-founded Uniq, a college information assistant for high school students on mobile devices with integration to custom backend
- o Uniq dramatically reduces the time spent on college research by condensing program information from various colleges into one unified app, so that the data is personalized and easy to access
- o Responsible for iOS development and business planning
- o Available on Bitbucket

# Hack the North - iPhone App

(July, 2014 - Sep, 2014)

- Allows hackers to quickly find the information they need during Hack the North 2014 hackathon at University of Waterloo
- o Currently working on Hack the North 2015 version with Swift
- o Available on the App Store: <a href="https://itunes.apple.com/us/app/hack-the-north/id917531622?ls=1&mt=8">https://itunes.apple.com/us/app/hack-the-north/id917531622?ls=1&mt=8</a>

# Space 7 - iPhone Game

(Oct, 2013 - Nov, 2013)

- o An open source Cocos2D iOS space shooter game
- o Available on the App Store: https://itunes.apple.com/US/app/id733590789?mt=8

## **EDUCATION**

# Candidate for Bachelor of Applied Science, Mechatronics Engineering, University of Waterloo

(Sep, 2012 - Present)

- Relevant Courses: Algorithms and Data Structures, C/C++ Programming, Digital Logic,
  Real Time Systems, Linear Signals, Sensors and Instrumentation, Actuators and
  Power Electronics, Microprocessor Systems and Interfacing
- Current Academic Term: 3A