# SI TE FENG 3B Mechatronics Engineering

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## SUMMARY OF QUALIFICATIONS

- **Languages:**
  - Proficient in Swift, Objective-C, C, C++, Javascript, HTML, CSS
  - Experienced with Python, Matlab, Shell
- **Tools/ Frameworks:** iOS SDK, ROS, Git, Cocos2D, JQuery, UIAutomation, XC Testing, Kiwi, Angular JS
- **Software:** Xcode 6, Eclipse, Solidworks, AutoCAD 2013, NX Unigraphics, EAGLE, Adobe Photoshop, Microsoft Office, Apple iWork
- **Electronics:** PLCs, Arduino, familiar various lab equipment and sensors

## WORK EXPERIENCE

### Mobile Robotics Application Engineering                    (Sep, 2015 - Dec, 2015)
Clearpath Robotics, Kitchener, ON

- Developed robotics vision software in python and C++ using ROS platform
- Familiarized with Linux while developing software systems for predicting robot costs and operational parameters

### iOS Developer                    (Jan, 2015 - Apr, 2015)
Pebble Technology, Palo Alto, CA

- Developed new features for the Pebble Time iPhone app with Objective-C. Features include watch onboarding, My Pebble locker, calendar event synchronization, and audio endpoint
- Used ReactiveCocoa and Core Data with MVC and MVVM design patterns

### 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 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

## PROJECTS

Sample code and demonstrations are available on my website

- **Voxel** (Dec, 2015 - Present)
  o Creating a wifi enabled modular LED stick that connects to a smartphone. This gives photographers an innovative tool to create light painting artworks with ease.
  o Planning to launch for mass production in 10 months
  o Working on the iOS companion app and product design along with 3 other co-founders

- **Hack the North iOS** (July, 2014 - Sep, 2015)
  o Designed, built, and released the iOS app for Hack the North at University of Waterloo for the past two years
  o Together with the Android team, enabled hackers to receive real-time event updates, push notifications, event schedule and prizes on their mobile phones
  o Built "Uber for Mentor" feature in 2015 that allows hackers to request help from experts on demand with chat integration

- **MetroArm** (Feb, 2015)
  o Designed and built a 6 DOF servo actuated robotic arm controlled by an Arduino
  o Made the MetroArm to record hand motion through Leap Motion and to mimic the actions
  o Won grand-prize in TreeHacks 2015 at Stanford University

- **Uniq – College Info Reimagined** (Nov, 2013 - Nov, 2014)
  o Built an iOS universal app for high school students with integration to custom server 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 Involved with iOS development in Objective-C/Swift, and business planning with the co-founder

- **Space 7** (Oct, 2013 - Nov, 2013)
  o Designed, programmed, and released the Cocos2D iPhone space shooter game

- **Personal Website** (May 16-18, 2015)
  o Created the website with HTML, CSS, Bootstrap, and AngularJS
  o URL: sitefeng.info

## EDUCATION

**Candidate for Bachelor of Applied Science,** (Sep, 2012 - Present)
**Mechatronics Engineering, University of Waterloo**

- 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: 3B