



## Tyler Casselman @ 13bit consulting

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### Profile

San Francisco based, iOS consultant offering a wide range of services and solutions. I've been an engineer in the mobile space since 2005 with a proven track record of completing projects on time and exceeding client expectations. At **Zynga**, I was responsible for bringing several high profile games to market, including Farmville for iOS and Cityville for iOS. Since becoming a fulltime consultant, I've shipped many utility and lifestyle applications for clients such as **Fitbit**, **Calm.com** and **BestBuy**. I'm particularly interested in BLE/IoT based applications and photo and video editing apps. I enjoy working closely with designers to build products that stand out.

### Experience

#### IOS ENGINEER 13BIT CONSULTING – 2012-PRESENT

- **Fitbit** - BLE enabled workout device  
Built UI for an unannounced feature. Written entirely in Swift.
- **Airware** - Helped implement a React Native application to automate aerial drone flight and image capture.
- **MetaSensor** - BLE enabled sensor  
Created the MVP written entirely in Swift. Responsible for UI as well as BLE communication with the device.
- **YouStar** - Video editing and effects  
Reskinned existing app adding iPhone and iPad support. Added new flat UI.
- **Cotap** - Enterprise mobile chat  
Rewrote chat conversation to look identical to Facebook Messenger. All new development done in Swift.
- **Zuli** - BLE connected home smart plugs  
Implement BLE communication system between hardware plugs. Rapidly implement plug control and historical energy usage UI.
- **Calm.com** - Meditation guidance via streaming video and audio  
Implement system to distribute video content to phones and to keep content updated

using md5 hashing. Project sole developer, brought product to market on time with few defects.

- **Momentage** - Photo and video sharing with a social component  
Refactor large amounts of code for modularity and performance. Update UI to modern, flat style.
- **Sequence** - Design firm  
Built a digit prototype of BestBuy's newspaper insert leveraging CoreAnimation and OpenGL to create a unique interface.  
Brought the WebMD - Pain Coach app, to market, which was several months behind schedule when I joined the project.

#### **SENIOR IOS ENGINEER ZYNGA – 2010-2012**

Full stack engineer on Cityville Hometown and Forestville for iPhone and iPad. Implemented several server side features in PHP; integrating with Zynga's backend services.  
Launched FarmVille for the iPhone; showcased by Steve Jobs at 2010 WWDC. Implemented several client side features utilizing UIKit as well as cocos2D. Integrated client with existing PHP backend. Challenges include support for a extremely large amount of content and optimizing load times.  
Sole inventor on patent #8244804 relating to business logic synchronization between client and server.

#### **SOFTWARE ENGINEER TACTEL – 2009-2010**

Lead developer on a map based iPhone application utilizing CoreData. Graphics/OpenGL ES developer on 3D Android application. Developer on multiple Blackberry applications.

#### **SOFTWARE ENGINEER AIRPLAY NETWORK – 2006-2009**

iPhone/Obj-C development. Design and implement real-time client/server mobile applications in JME. Convert framework and apps to BREW from JME utilizing memory management. GUI, Network/Protocol and Event Handling systems design and development. Build system design and implementation using Ant, Python and J2mePolish.

#### **HUDSON ENTERTAINMENT – 2005-2006**



## Education

**University of California, Santa Cruz** – BA 2002

**DigiPen Institute of Technology**, Bellevue, WA

Cumulative GPA: 3.73; Dean's List 2004, 2005.

GRE exam: 750 Math; 500 Verbal.

Studied Real Time Interactive Simulation (Gaming) with an emphasis on computer graphics for 2 years.

Linear Algebra, Linear Algebra for Graphics and Modeling, Calculus, Discrete Mathematics and Statistics.

Assembly programming for embedded systems, Unix, graphics and networking.

## Skills

Multiple iOS applications written in Swift, Objective-C and C++.

RxSwift, AVFoundation, CoreData, CoreAnimation, CoreAudio, CoreBluetooth Frameworks.

Java/Android.

SQL: MySQL, SQLite, Postgres

Standalone web applications written in RoR, Python, PHP, AWS.

Tools: Xcode, Vim, Git, Rake, Zsh, RubyMine.

OpenGL ES experience including proficiency with linear algebra.

REST based applications development; network programming.

Embedded microcontroller/Arduino experience.

Excellent verbal and written communication.

## References

Available upon request.