



Tyler Casselman @ 13bit consulting

415-734-7235 tyler@13bit.io 4146 22nd st San Francisco CA 94114

Profile

Senior iOS engineer with professional experience in the mobile industry since 2005. Experience with REST based APIs as well as social network integration, BLE integration with embedded systems. Experience creating custom UIKit based interfaces leveraging OpenGL and GLSL. Implemented tools and services with PHP and RoR backend technologies. Other interests include hobby electronics, cooking and Photography.

Experience

IOS ENGINEER 13BIT CONSULTING – 2012-PRESENT

- **Fitbit** - BLE enabled workout device
Built UI for an unannounced feature. Written entirely in Swift.
- **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.