

Work Experience

iOS Engineer **Imgur** | Jan 2015 – Current

- Part of 3 person team that rewrote the iPhone app from scratch to be fully native.
- App involves: Animations, interfacing with Imgur, Facebook and other APIs, custom UI controls, and uses UIKit.
- Experienced with mixing Swift into an existing Obj-C code base.
- Major features worked on: GridView, Notifications, Topics, Menu (old), and build automation.

iOS Developer **Standards Design Group** | Apr 2014 – Dec 2014

- Developing an iPhone version of SDG's Window Glass Design program
- Implementing proprietary and ASTM standards for calculating glass load resistance
- Creating custom interface and animations using the Facebook pop animation library

Developer/Cofounder **Limerick Design** | Mar 2012 – Current

- Developed and released an iPhone app for Texas Tech College of Media and Communications
- App involved: XML Parsing, JS injection, audio streaming, menu animations and optimization
- Works currently in production: FoodForks, a recipe sharing app based on github-style version control; Habit, an app that helps with tracking personal behaviors
- Portfolio can be seen at: www.limerickdesign.com/portfolio

iOS Developer **Dry River Media** | Oct 2011 – Jan 2012

- Developed an iPad app that promoted athletic departments at various colleges.
- Used Cocos2D (game engine) for sprite animation.

UX/IA Intern **USAA** | Summer 2011

- Worked in Product Delivery to design, test, and implement code for a life insurance web app
- Prototyped iPad and Android apps for marketing to reach a wider audience

Systems Engineer Intern **Northrop Grumman** | May 2009 – Nov 2009

- Redesigned customer facing website using Wordpress and CakePHP to increase usability and security
- Operated within military guidelines for security of access control
- Worked with Perl scripts for EPODS (mapping software) to retrieve maps from external servers

Awards and Activities

First Place – Texas Tech University App-a-thon | 2014

- Developed an iPhone app within 24 hours with custom animations that links into data sets for TTU's Study Abroad program

First Place – Texas Tech University App-a-thon | 2013

- Developed an iPhone app with user login, micro blogging, geotagging/caching, and push notifications in 24 hours. Theme: Humans vs Zombies (a game played by students on campus multiple times a year)

Eagle Scout, Boy Scouts of America, Dallas, Texas | Aug 2004

- Led over 20 scouts to build a mini-dam for a canoe & kayak launch site at a local river and fund-raised over \$5000

Technical Skills

Languages: Objective C, Swift, C, Verilog, Java, Javascript, PHP, MySQL, HTML5/CSS3

Tools: Xcode, Xilinx ISE, Eagle CAD, Adobe Creative Suite (Photoshop, InDesign, Flash)

Education

Bachelor of Science, Computer Engineering @ Texas Tech University, Lubbock, Texas

Relevant Classes

- Technology Start Up Lab
- Digital System/Logic Design
- Electromagnetic Theory
- Systems Programming (UNIX)
- Linear System Analysis
- Communication Systems
- Software Engineering (I & II)
- Microcontrollers

Engineering Projects (ECE)

Multi-Purpose CNC Machine | Fall 2014

Designed a multipurpose Computer Numerical Controlled (CNC) machine with 30 micron resolution for milling circuit boards. Wrote basic GCode interpreter on a TI Tiva C-Series ARM microcontroller. Server written in Node.JS that relayed information between the UI (webpage) and microcontroller.

Phase Locked Loop Based Local Oscillator | Summer 2014

Designed a PLL LO for use in a multimode transceiver. A TI MSP430 micro controller was used along with a keypad and display for user I/O and to control RF circuits with a VCO (voltage controlled oscillator) to adjust output frequency. Designed for the amateur band range (19-20.7 MHz). Circuit board designed with Eagle with considerations for radio frequency range.

Sound Reactive LED Stick | Spring 2014

Device would detect ambient sounds and use analog filters to react to different frequencies (Bass, Midrange, Treble). AVR micro controller with built in ADC used to turn signals into various patterns for LEDs. PCB was designed and manufactured for final product.

Automated Drink Machine | Spring 2014

Machine mixes measured amounts of various liquids and returns a cup to the user. MSP430 micro controller was used to control servos in 3D printed 3-axis arm and solenoid valves. A Raspberry Pi computer was used for a wireless user interface (accessed via smartphone) and sent commands to the micro controller via UART.

Autonomous Tank Robot with Light and Metal Detectors | Fall 2013

Designed and implemented an autonomous tank that could locate and move toward a 1kHz LED beacon while detecting and moving steel washers from its path by using metal proximity sensors and an electromagnet on a servo mounted arm. Written in Verilog on a Xilinx FPGA.

Work Experience Continued

Web Developer **TTUISD** | Sept 2012 - Jun 2013

- Developed student-facing administrative web apps.
- Converted snail-mail/phone processes to automated web based and integrated with existing site.

Designer **GAMA** | Jan 2010 – May 2010

- Designed & distributed the 2010 catalog of over 5800 items.
- Responsible for various design needs including: website updates, sales flyers, & photography of new items.
- Customized/updated Windows Mobile 5 interface for Metrologic Barcode Scanners.