



## Work History

### Barney D. Media, LLC

Developer, from 4/2013 to present

### Liberty University

Internal Web Stack Dev. and Email Marketing, from 8/2012 to 8/2015

### IFR

Design & Video Intern, from 8/2011 to 12/2011

### Liberty University

Photographer and Archive Searchist, from 10/2010 to 8/2011

### Full Spectrum Photography

Owner/Photographer, from 10/2007 to 10/2010

### Comcast/Adelphia

Control Room Operator, from 2/2005 to 4/2007

### Growing Digital Network/RCATT

Technical Director and Network Tech, from 5/2002 to 5/2005

## Education

Master of Arts in Management and Leadership – Spring, 2015

Bachelor of Science in Visual Communication Arts - Spring, 2012

## Interests

Learning C++, Java, Ruby, Python  
Internet of Things  
Open Source Software  
Algorithmic Programming  
Bitcoin and other Altcoins  
Gaming with Friends  
Running and Weight-lifting

## Accomplishments (see next page)



## Technologies

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    "Minitab",
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```



## Accomplishments

### Workforce Management System (WMS)

Led a team of 4 people to create a Time-Off coordination software that simplified the process for requesting and approving time off periods. By building a system that used Mandrill for sending email notifications, javascript based charts, and an AJAX centered one page app, the request process was shortened from 3-4 weeks from initial request to completion, to 3-4 days between initial request and completion. This system also allowed for automated holiday request submittal reminders, advanced statistics, and other convenience features. The front end used Bootstrap and jQuery extensively, and the back end made use of the Code Igniter Framework.

*Tech Used: Cron, MySQL, PHP, Code Igniter, jQuery, Javascript, AJAX, Bootstrap, Mandrill, jQuery UI, Git, SourceTree, Bitbucket*

### LynchStock iOS App

Assisted in creating a mobile app for a local concert series. The app displayed band information, live social media feeds, and user customized favorite band line-ups. The app was uploaded to and approved by the app store. Provided assistance with the user favoriting system and some general Angular related tasks.

*Tech Used: Angular.js, Ionic, CSS, HTML*

### “Carlton” - Email Marketing Newsletter Generator

Helped create an automated system to produce multi-part department specific newsletters from extra-departmental information sources. This Node.js based system reduced a 1.5 hour process that recurred roughly 10-12 times weekly into a process that took about 5 minutes and was nearly push-button to operate. These departmental newsletters had custom graphics and layouts respective to each department, varying social media and contact information, a condensed version sent by email, a full text web hosted version, and were typically sent to tens of thousands of users at once.

*Tech Used: Node.js, Javascript, Request.js, Async.js, Mandrill, Git, SourceTree, Bitbucket*

### College Ipsum

Created a simple web scraping loop to ingest website data into MySQL for use in a Markov chain generator, and a web service based on such. While mainly a learning exercise, a web based service was created in order to serve precomputed Markov chains back to designers within the department. Performance was kept to optimal levels by precomputing chains using 17 cores overnight, dividing the resulting text into smaller files to be switched out quarter-hourly, and rendering random paragraphs on demand from those subsets. Using plain english Lorem Ipsum that was labeled as such, as opposed to the standard Latin set, greatly reduced the number of times quality control mistakenly questioned the use of translated text in an English audience design piece.

*Tech Used: PHP, MySQL, Node.js, Request.js, Git, SourceTree, Bitbucket*

### Marketing Department Standard Operating Procedures CMS

Initially, as the goals were laid out for this official documentation system it was decided to build a simple but custom CMS to fit the needs of the department. The initial system was built on a PHP/MySQL back end with a Javascript/jQuery/AJAX front end, and had features like post versioning, post diffs, and instant search. After building and maintaining the system for a prolonged period of time, however, it was realized that with a bit of custom work the system could be migrated to WordPress and upgraded and maintained more easily. This allowed for faster feature deployment since many times there was a plug-in already available to fulfill the need. This system served a department of 80 people, with a documentation size of about 85,000 words updated almost daily (19MB DB size).

*Tech Used: Javascript, jQuery, PHP, AJAX, MySQL, WordPress, Bootstrap, Font Awesome, Git, SourceTree, Bitbucket*

### Metabolic Bootcamp Website - Administration and Expansion

Maintained for over 1 year a public facing e-commerce



site, generating thousands of dollars per month. Administration included fixing occasional site degradations, running multi-plugin and site wide updates (and cleaning up after breakages caused by updates), building in customized functionality to site theme and developing new plug-ins.

*Tech Used: Wordpress, Woo Commerce, Flatsome Theme, Javascript, PHP, Git, SourceTree, Bitbucket*

## “Postal” - Creative Content Generator for Email Marketing

Worked with a team to create an email marketing editing and tracking solution specific to the needs of several departments involved. The front end was a web client that allowed users to customize the appearance and layout of an email campaign before saving to the database and allowing collaboration with other writers and Quality Control personnel. Angular was used extensively to quickly return information from the Express.js based API, while jQuery was used to facilitate dynamic HTML injection from an extensive and dynamic plug-in retrieval system. Text and metadata from each user created document was stored into MongoDB, and was later rebuilt on the fronted via a dynamic template retrieval system. User data and email campaign statistics were planned and accounted for in the initial design of the app, however, due to department restructuring, the app was never fully completed.

*Tech Used: Node.js, Express.js, Angular.js, jQuery, jQuery UI, MongoDB, Bootstrap, Font Awesome, Git, SourceTree, Bitbucket*

## Simple Sked - In Progress

Worked with a team to build an app that coordinated and improved the scheduling of hourly employees by ingesting employee requests and management needs, then algorithmically sorting the data and building a viable schedule. Also coordinates employees outages and request reminders using Mandrill for email and Twilio for SMS. The system runs on a Node.js instance (eventually on AWS), and handles everything through a web interface. Eventually, the responsive web interface will be forked into an Ionic based package in order to create Android and iOS apps.

*Tech Used: Javascript, Express.js, Node.js, Sequelize.js (ORM), Jade Templates, SCSS styles, MySQL, Angular.js, Gulp, Wordpress, Git, SourceTree, Bitbucket*

## Bit Slap Ninja (OSS) - In Progress

Worked alone to create a cross platform peer-to-peer mesh networking discussion forum system. The back-end is almost entirely Node.js scripts and servers, while the front end is also driven from Node.js via the Electron framework. Electron and Node.js allow for an app that can be installed cross platform and continuously updated via Git commands and platform specific package managers (Homebrew, et al). The local network peer discovery and user configurable tracker list allows each instance to be complete and independent of any external resources, both preserving the freedom of the user to personalize their blacklists and independent custom or mirror trackers to be built and deployed.

*Tech Used: Express.js, Node.js, Sequelize.js (ORM), Electron, UDP, MySQL, Homebrew/Chocolatey/Apt-Get, Bash, SCSS, Angular, Materialize, Javascript, Git, SourceTree, Bitbucket, GPG*

## MAMP server

Built and maintained a reliable \*AMP server on a Mac Mini running from a supply closet, serving many users over multiple departments. This server housed and served all internally developed web applications and had little downtime over 3 years. It used Cron to run nightly database backups and run frequent tasks and was never compromised.

*Tech Used: Apache, PHP, MySQL, Git, Bitbucket, Cron, SSH, Sequel Pro*

## Email Marketing - Liberty University

Doubled the average open rate of email campaigns across the board, standardized and templated the process for building new creative email templates, educated designers and writers on best practices and market research by leading regular meetings, and greatly reduced both the time required to produce a creative email campaign and the number of errors incurred when producing them (from 1-2 per campaign



to a handful each quarter). Worked with project managers department wide, and directed a team of 4 people in completing the work.

*Tech Used: HTML, CSS, Email on Acid, Sublime Text, Dreamweaver, Photoshop, Excel, Minitab, Git, SourceTree, Bitbucket*

## Lynchburg Photoworks

Created a basic WordPress installation and theme for a local photography supply store. The site contained several informational pages and was minimally interactive, a standard small business site. A redesign is currently underway, pending client changes.

*Tech Used: WordPress, CSS, PHP, Git, SourceTree, Bitbucket*

## Department Meeting Slide Presentation Framework

Customized and standardized a Bootstrap, Javascript, and HTML based slide presentation tool to aid in rapidly building presentations for departmental statistics reviews. This improved data heavy report creation time from 3.5 hours to 1 hour.

*Tech Used: HTML, CSS, Bootstrap, Impress.js, Git, SourceTree, Bitbucket*

## Listen Ticker

A simple app, Listen Ticker is a Mac only terminal app that displays information about currently playing music via Spotify or iTunes. It's design was to give a very minimal and utilitarian output in order for the user to largely bypass the large and intrusive Spotify app window by glancing at a small terminal window and using keyboard shortcuts to skip, pause, etc.

*Tech Used: Node.js, AppleScript, Git, SourceTree, Bitbucket*

## “Magic Conch” - A Very Simple Chatbot

The Magic Conch app is a minimal terminal only app,

built simply to cut down on the amount of time spent between teams deliberating about where to eat lunch. It uses a provided JSON file of local restaurants and builds a weighted random suggestion of where to eat and then sends it to the intended Hipchat room via their Jabber API.

*Tech Used: Node.js, Hipchat API*

## “Carl” - Hubot Instance on Heroku

Customized and deployed a simple Chatbot to Heroku for use in a Hipchat group. Carl is a private fork of Hubot (specifically, of Triatomic) that was customized a bit to meet the needs of the group. Carl is able to retrieve images from Google, check Bitbucket repos, answer simple legal questions, etc.

*Tech Used: Github, Node.js, npm, Heroku Toolbelt*