

Brandon Clark

(336) 290-3328 | r.brandon.c@gmail.com | www.rbrandonc.com | www.github.com/rbrandonc

Education

University of North Carolina at Chapel Hill

B.A. Computer Science

Expected May 2018

Relevant Coursework

Modern Web Programming
Foundations of Programming
Data Structures
Linux Lab
Computer Hardware I/II

Project Lead The Way - Electronics
Game Design
SAS Programming I/II
Computer Organization
Operating Systems

Files and Databases
Introductory Robotics
Info Systems Analysis
Web Technologies

Projects

GymNOW

- An Ionic (angular2) iOS/Android app for selling single use passes and managing gym classes
- Includes web dashboard for gym owners to manage multiple facilities, payment information, and check in customers
- Users can find gyms by price, classes offered, amenities, view photos of each location, and purchase passes for classes and gym access

Malware Map

- An interactive map displaying geocoded malware IPs
- Includes a full CI build pipeline and integration/unit testing with Travis and Heroku integration
- Includes a small node/express service layer for managing the malware data

Stop The Outbreak

- An interactive gaming experience developed for an exhibit at the Moorehead Planetarium
- Created custom node/websocket framework for synchronous gaming across 3 displays

Macrotrack

- React native app for nutrient tracking

Medieval

- A Node/Express/Websocket multiplayer browser game

Minimail

- A material design gmail client written in electron

Electric Longboard Nunchuck

- A wii nunchuck fitted with an arduino and 433Mhz radio for control of electric longboards

Superpool Based Memory Allocator

- Created as a replacement for malloc
- Based on Hoard's SLAB allocation

Bash Shell replacement

- A project to recreate many Bash functionalities (basic commands, piping, IO redirection, job management)

Tree-based DNS Server

- A set of multi-threaded DNS servers that compare efficiency across varying locking coarseness on a tree of domains

Calcuweightor

- Ionic cross-platform app for calculating weights in the gym (play store published)

Skills

- **Languages:** Java, JS/TS (ES6), C, C#, PHP, SQL, mongoDB, HTML5, CSS3/SASS, LABview, SAS, Arduino C, Assembly, Shell Script
- **Frameworks:** NodeJS, Angular, React/React Native, JQuery, LibGDX, Express, Ionic, Karma
- **Other Tools/Software:** Git, Bash, Webpack, GDB, Figma, Chrome Devtools, Postman, Inkscape, Windows, Linux, Apache., Microsoft Office products, Adobe products, Unity, Blender, Anchor CMS, Eagle, KiCAD, Autodesk products, Google Sketchup

Professional Experience

Quantworks

Summer 2017

Full Stack Intern

Worked on a team developing the cross-platform Ionic framework (angular2) based mobile application, "GymNOW".

- Responsible for designing, building, and debugging Android and iOS apps and a web based management dashboard
- Developed a RESTful backend API, created database schema, unit tests, and build pipeline
- Wrote systems for managing user credentials, permissions, payment information, and business information
- Utilized agile development techniques to adapt to client requirements
- Used source control to facilitate team collaboration