**Brandon Davis**

brandon@subdavis.com  **|** Chapel Hill, NC 27516 **|**  github.com/subdavis **|** subdavis.com

**Education\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ \_\_**

**University of North Carolina at Chapel Hill** Expected May 2017

* Bachelor of Science in Computer Science, Minor in Mathmatics

**Leadership Experience**

* UNC Computer Science Club Co-President 2016 – 2017
* HackNC Director of Development – build website and registration system 2016 – 2017

**Relevant Coursework**

* Software Design (Java), Files and Databases, Advanced Web Development, Algorithms and Analysis, Computer Graphics, Digital Logic (Architecture), Operating Systems, Offensive Security
* Calculus 1 – 3, Discrete Mathematics, Linear Algebra

**Work Experience \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_**

**Cisco Systems, Inc** (RTP, NC) May 2016 – August 2016

*Software Engineer, Intern*

* Developed internal python API to enable my team to communicate with Cisco’s bug tracking system
* Extended team’s Django app with new endpoints and added authentication / Swagger documentation
* Designed python scripts to catalog and generate checksums for ~100TB of cisco firmware for customers
* Built command-line utility to maintain bug data caches, enabling faster lookup times for our applications
* Designed BASH backup scripts for my team’s production database, ensuring recoverability of our data

**SQL Sentry, LLC** (Charlotte, NC) June 2015 – March 2016

*QA Specialist, Intern*

* Created robust test suite in Ranorex for automating nightly production web application testing, enabling faster detection of problems in our web services. Included daily email reports to project team members.
* Developed internal tools in C# to extend MS Team Foundation Server task management, particularly to catalog new test cases and include them in future regression tests.

**UNC Information Technology Services** (Chapel Hill, NC) November 2014 – May 2015

*Walk-in Technician*

* Diagnosed and repaired software issues on OS X and Windows
* Recovered and backed up client data using department's custom scripts or advanced Linux tools
* Communicated 1:1 with students and faculty to troubleshoot technology and resolve client issues

**Projects\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_**

**OpenCV BitCamp Hackathon Project** (C++/Python) March 2016

* Two-member team project for BitCamp at UMD created in 36 hours
* Built a physical “joystick” to be tracked by a single web-cam out of miscellaneous art supplies
* Learned computer vision (OpenCV) to construct a 3D orientation matrix from 2D points (pose transform)
* Used this model as input for an OpenGL flight simulator game created by my teammate

**Spotify Predictive Playlists** (Python/MySQL/Flask/HTML/JavaScript) October 2015 – December 2016

* Wrote a web crawler and used Spotify API to fetch data and populate ~300,000 song/playlist records
* Designed a database schema to hold these records, and used proper indexing to optimize my queries
* Designed SQL queries for analyzing trends and predicting new content based on user preferences
* Implemented a REST API using Python/Flask and a web front end for interacting with the data

**HackNC Mobile Application** (HTML/CSS/JavaScript/Python/Flask) August 2015 – October 2015

* Helped develop the first mobile event application for UNC's fall hackathon.
* Wrote dynamic schedule for updating and adding events ad-hoc
* Helped create a system to link students with mentors, handling concurrency and backend services

**Skills \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Languages** Python, C#, C++, Java, SQL, JavaScript, BASH, HTML/CSS

**Other Technologies** (Debian-based) Linux, Git, SQL Server/MySQL/PostgreSQL, Ranorex