

# Brandon Davis

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## Education

### University of North Carolina at Chapel Hill

Expected May 2017

- Bachelor of Science in Computer Science, GPA 3.36

### Relevant Coursework

- Computer Organization and Design, Software Design (Java), Files and Databases, Advanced Web, Algorithms and Analysis, Computer Graphics, Digital Logic
- Calculus 1 – 3, Discrete Mathematics, Linear Algebra

### Leadership Experience

- UNC Computer Science Club Co-President 2016-2017
- HackNC Development Team Leader 2016-2017

## Work Experience

### SQL Sentry, LLC (Charlotte, NC)

June 2015 – March 2016

#### QA Specialist, Intern

- Created robust test suite in Ranorex for automating production web application testing
- Worked as part of an agile team testing desktop and web software
- Developed internal tools for assisting with TFS task management
- Identified and reported bugs to development branch

### 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
- Communicated one-on-one with students and faculty to troubleshoot technology

### Mitchell High School IT Department (Ledger, NC)

June 2011 – May 2013

#### IT Assistant

- Imaged and diagnosed computer problems on Apple MacBooks for 450 students and faculty
- Greeted clients and gave preliminary assessment of their issues
- Managed the IT help desk when my supervisor was away or unavailable
- Assisted with MySQL DB management manually and with my own custom written PHP scripts

## Personal 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 of the joystick
- 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, T-SQL / SQL, JavaScript, BASH, HTML/CSS

**Other Technologies** Apache2, MongoDB, MS SQL Server/MySQL, Ranorex, Debian Linux user for 4+ years