

Brandon Davis

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Education

University of North Carolina at Chapel Hill

May 2017

- Bachelor of Science in Computer Science, Minor in Mathematics

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

HackNC 2016 Website + Registration (Python/Flask/HTML/JavaScript/PostgreSQL) June – October 2016

- Lead a team to design and build hacknc.com – the largest advertising medium for the event
- Designed an accompanying registration system from scratch to process ~1500 applications
- Created clean logistical dashboard with information for event attendees
- Deployed and maintained day-of systems like the mentor connection queue and judging system

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

Reddit Accessible (JavaScript/CSS/Node/MongoDB)

March – May 2017

- Chrome extension to rearrange the reddit.com interface to be more intuitive and readable
- Added event-driven model to allow switch users with two buttons to autonomously navigate all content
- Includes Node back-end to parse and serve external articles so that every kind of content can be served into a single switch-accessible page

Skills

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

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