

# DWAYNE CHRISTIAN BROWN, JR. (“CHRIS”)

✉ dcbrown@cs.vt.edu 📍 Raleigh, NC 🌐 <https://chbrown13.github.io> **in** in/chris-brown-04840654 📄 chbrown13 🐦 @d\_chrisbrown2

## EDUCATION

---

**North Carolina State University** 2015 - 2021

*Ph.D.* in Computer Science

“*Digital Nudges for Encouraging Developer Behaviors*”, Advised by Dr. Chris Parnin

Teaching and Communication *Graduate Certificate*

*M.S.* in Computer Science (completed 2017)

**Duke University** 2009 - 2013

*B.S.* in Computer Science, with Distinction

## TECHNICAL SKILLS

---

**Red Hat Certified System Administrator (RHEL 7)**

**Programming languages:** Python, Java, R, Ruby, C#, C++, C, HTML, JavaScript, SQL

**Tools and Technologies:** Git, Ansible, Jenkins, Docker, TravisCI, Maven, Linux, Windows, LaTeX, Android

## EXPERIENCE

---

### Research:

**Research Assistant** *North Carolina State University* Raleigh, NC Fall 2016 - Spring 2021

· Conducted a user study to determine effective characteristics of peer interactions for tool recommendations

· Developed and evaluated **Flower**, **tool-recommender-bot**, and **class-bot** to improve developer behaviors

· Mined GitHub repos, surveyed users, and designed user studies to observe developer behavior

· Published and presented research at various peer-reviewed research and industry conferences and workshops

**Independent Study** *North Carolina State University* Raleigh, NC Fall 2016

· Designed an algorithm using automated program repair concepts to grade introductory programming assignments

**Undergraduate Research Fellow** *Duke University* Durham, NC May 2012 - May 2013

· Researched integrating computer science into middle school education with Alice

· Mapped Common Core K-12 standards to CSTA computer science education standards

· Created tutorials for students and teachers to create Alice worlds based on educational concepts

· Wrote thesis “*Integrating Computer Science Into Middle School Mathematics*” and published work at conferences

**CRA DREU Researcher** *Brown University* Providence, RI/Moss Beach, CA Summer 2011

· Investigated applications for integrating robotics into society using ROS and Python with iRobot Create robots

### Industry:

**Quality Engineering Intern** *Red Hat* Raleigh, NC Summer 2017, 2018

· Verified bugs and automated tests with Python for the robottelo test suite for Red Hat Satellite 6

· Explored Federal Information Processing Standards (FIPS) compatibility for Satellite 6 (2018)

· Created Ansible roles to automatically test and install Red Hat Satellite (2018)

· Implemented satellite-populate modules to configure and run robottelo tests with Docker using YAML files (2017)

**Software Quality Engineer Intern** *Blackbaud* Charleston, SC Summer 2016

· Fixed C# bugs and verified test cases for Online Express and Sky Email

· Improved Givalanche API Documentation with Swagger and the Blackbaud Stache framework

· Constructed a dashboard to monitor the status of Online Express using AppDynamics

**Python Developer** *Bank of America* Charlotte, NC 2013 - 2015

· Used agile methodologies to develop, maintain, and test Python code for the Manual Adjustment Tool

### Teaching:

**Instructor of Record** *North Carolina State University* Summer 2020

Primary instructor for the Introduction to Computing: Java (*CSC116*) course at North Carolina State University

**Python Tutor** *The Coding School* Summer 2019

Taught Python programming through the codeConnects program for underrepresented minorities in STEM

**Teaching Assistant** *North Carolina State University* 2015 - 2016

Graded assignments, taught labs, held office hours, and managed Jenkins projects for undergraduate courses in Java

## EXTRACURRICULARS, SERVICE, AND AWARDS

---

**Hackathons:** HackDuke 2019 (Volunteer), Hacktoberfest 2019, PackHacks 2018, Open Jam 2017, Duke Men’s Basketball Hackathon, HackNC 2016, HackDuke 2016, Off the Grid 2016 (Blackbaud)

**Organizations:** ACM, IEEE, Python Software Foundation, Linux Foundation, Minority Engineering Graduate Student Association (MEGSA), Red Hat Blacks United in Leadership and Diversity (BUILD)

**NC State CSC PhD Recruitment Event** Coordinator Spring 2020

**All Things Open** Open Source conference volunteer October 2016, 2017, 2018, 2019

**INTech Code Camp** Coding day camp for African American middle school girls volunteer April 27, 2019

**DevConf.US Diversity Scholarship** Open source technology conference June 2019