

DWAYNE CHRISTIAN BROWN, JR. (“CHRIS”)

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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