

DWAYNE “CHRIS” BROWN, JR.

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EDUCATION

- North Carolina State University** 2015 - present
Ph.D. in Computer Science
Advisor: Chris Parnin
- North Carolina State University** 2015 - 2017
M.S. in Computer Science
- Duke University** 2009 - 2013
B.S. in Computer Science, with Distinction
Minor in African and African American Studies

INDUSTRY

- Red Hat** Summer 2018
Quality Engineering Intern Raleigh, NC
- Examined Federal Information Processing Standards (FIPS) compatibility and created Ansible roles to testing and installing Red Hat Satellite
- Red Hat** Summer 2017
Quality Engineering Intern Raleigh, NC
- Verified reported bugs, wrote automation tests, and helped test and maintain a new test automation framework satellite-populate for Red Hat Satellite 6
- Blackbaud** Summer 2016
Software Quality Engineer Intern Charleston, SC
- Used AppDynamics to create a monitoring dashboard, added documentation for Givalanche, and wrote C# code to fix bugs in Online Express
- Bank of America** 2013 - 2015
Python Developer Charlotte, NC
- Wrote Python code to develop and maintain the Manual Adjustment Tool application

RESEARCH

- Research Assistant** Fall 2018 - present
North Carolina State University Raleigh, NC
- Integrating nudge theory in software engineering to encourage developer actions with Dr. Chris Parnin
- Research Assistant** Fall 2017 - Spring 2018
North Carolina State University Raleigh, NC
- Developing a bot to increase tool awareness and usage among developers with Dr. Emerson Murphy-Hill
- Research Assistant** Fall 2016 - Spring 2017
North Carolina State University Raleigh, NC
- Conducted user study analyzing recommendations between peers with Dr. Emerson Murphy-Hill

Independent Study

North Carolina State University

Fall 2016

Raleigh, NC

- Studied integrating automated program repair into computer science education with Dr. Guoliang Jin

Computer Science Undergraduate Research Fellow

Duke University

Summer 2012 - Spring 2013

Durham, NC

- Studied integrating computer science concepts into K-12 education with Dr. Susan Rodger

Distributed Research Experience for Undergraduates (DREU)

Brown University

Summer 2011

Providence, RI - Moss Beach, CA

- Researched applications for robotics in society with Dr. Chad Jenkins for the Computing Research Association DREU program

PUBLICATIONS

Conference Papers

Mining Specifications from Documentation Using a Crowd

Peng Sun, *Chris Brown*, Ivan Beschastnikh, and Kathryn Stolee

SANER 2019

Hangzhou, China

- International Conference on Software Analysis, Evolution and Reengineering

How Software Users Recommend Tools to Each Other

Chris Brown, Emerson Murphy-Hill, Justin Middleton, Esha Sharma

VL/HCC 2017

Raleigh, NC

- Visual Languages and Human-Centric Computing

Flower: Navigating Program Flow in the IDE

Justin Smith, *Chris Brown*, Emerson Murphy-Hill

VL/HCC 2017

Raleigh, NC

- Visual Languages and Human-Centric Computing

Weaving Computing into all Middle School Disciplines

Susan H. Rodger, *Dwayne Brown*, Michael Hoyle, Daniel MacDonald, Michael Marion, Elizabeth Onstwedder, Bella Onwumbiko, and Edwin Ward

ITiCSE 2014

Uppsala, Sweden

- Innovation and Technology in Computer Science Education

Workshops

Sorry to Bother You: Designing Bots for Effective Recommendations

Chris Brown, Chris Parnin

ICSE 2019

Montreal, QC, Canada

- International Conference for Software Engineering (paper)

Experimenting with and Integrating Alice 2.3 into many disciplines

Susan H. Rodger, Steve Cooper, Wanda Dann, *Dwayne C. Brown, Jr.*, Jacobo Carrasquel

SIGCSE 2013

Denver, CO

- ACM Special Interest Group on Computer Science Education (presentation and demo)

Doctoral Symposium

Digital Nudges for Encouraging Developer Actions

Chris Brown, Chris Parnin

BotSE 2019

Montreal, QC, Canada

- International Workshop on Bots in Software Engineering

Posters

Integrating Computer Science into Middle School Mathematics

Susan H. Rodger, Dwayne C. Brown, Jr., Michael Hoyle, Michael Marion

SIGCSE 2013

Denver, CO

- ACM Special Interest Group on Computer Science Education

TEACHING

Python Instructor

The Coding School

June - August 2019

Virtual

- Tutored a high school student through the codeConnects teaching and mentorship summer program.

Java Tutor

NC State CSC116: Introduction to Programming Java

August - December 2017

Raleigh, NC

- Tutored students in the Introduction to Computing Java course through NC State Students and Technology in Academia, Research and Service (STARS)

Java Tutor

AP Computer Science

August - December 2016

Raleigh, NC

- Tutored a local high school student enrolled in AP Computer Science

Teaching Assistant

NC State CSC216: Java Programming Concepts

January - May 2016

Raleigh, NC

- Graded programming assignments and exams, held office hours for students at N.C. State

Teaching Assistant

NC State CSC326: Software Engineering

August - December 2015

Raleigh, NC

- Graded assignments and exams, held office hours, and taught lab sections at N.C. State

C Tutor

Central Piedmont Community College

January - May 2015

Charlotte, NC

- Tutored a student taking an introductory C programming class at CPCC

Alice Activity Day

Duke CSURF

March 23, 2013

Durham, NC

- Taught Alice programming to local 6th grade students in two 3-hour sessions for research study

Creating a 3D Interactive Story

Duke FEMMES

February 22, 2013

Durham, NC

- Taught Alice programming to 4th-6th grade girls for Females Excelling More in Math, Engineering, and Science event

Adventures in Alice

Oak Grove Middle School

November 30, 2012

Winston-Salem, NC

- Taught Alice programming to three 6th grade math and science classes

PRESENTATIONS

DevConf.US

"Sorry to Bother You! Effective OSS Recommendations"

August 15-17, 2019

Boston, MA

- Accepted talk presented at DevConf.US 2019 OSS developer community and technology conference

Free Open Source Software Interest Group

January 25, 2019

Lightning Talk

Raleigh, NC

- Presented my research as a lightning talk for the FOSS Interest Group meeting at NC State

Red Hat QECampX

October 10, 2018

“How to Improve Software Tool Discovery and Usage”

Raleigh, NC

- Accepted talk presented at the Red Hat QECampX quality engineering conference

Linux User’s Group @ NC State

February 28, 2018

Lightning Talk

Raleigh, NC

- Presented my research as a lightning talk for the Linux User’s Group

Intern Expo

August 2017, 2018

Red Hat

Raleigh, NC

- Showcase and demo internship projects to Red Hat employees

Laboratory for Analytic Sciences

November 29, 2017

Wednesday Research Meeting

Raleigh, NC

- Invited talk to present my research at the Laboratory for Analytic Sciences’ weekly research meeting

Intern Showcase

August 2016

Blackbaud

Raleigh, NC

- Present the work completed during my internship to Blackbaud interns and employees

OTHER CONFERENCES

DevConf.US 2019

August 15-17, 2019

Red Hat

Boston, MA

Computing Research Association URMD Grad Cohort Workshop

March 21-23, 2019

Computing Research Association

Waikoloa Village, HI

- Attended the CRA Underrepresented Minorities & Persons with Disabilities Graduate Cohort Workshop

National Society of Blacks in Computing (NSBC)

2017, 2018

Institute for African-American Mentoring in Computing Sciences

Attended NSBC 2017 (Atlanta, GA) and NSBC 2018 (New Orleans, LA)

Open Source 101¹

2017, 2018

Opensource.com

Raleigh, NC

All Things Open²

2016, 2017, 2018

Opensource.com

Raleigh, NC

Foundations of Software Engineering (FSE/ESEC)

2016, 2018

Association for Computing Machinery

- Attended FSE 2016 (Seattle, WA) and FSE 2018 (Orlando, FL)

¹<https://opensource101.com/>

²<https://allthingsopen.org/>

- Attended the LeaderShape leadership retreat

SERVICE

All Things Open October 13-15, 2019
Volunteer *Raleigh, NC*

- Signed up to Volunteer at the 2019 All Things Open conference

NC State CSC PhD Recruitment Weekend March 1-2, 2019
Volunteer *Raleigh, NC*

- Volunteered for the computer science department PhD Recruitment Weekend for potential doctoral students

Bridge to the Doctorate Program February 15, 2019
Graduate Student Panel *Raleigh, NC*

- Participated on a graduate student panel answering questions for NC Louis Stokes Alliance for Minority Participation (NC-LSAMP) students on what it's like to be a PhD student at NC State

All Things Open October 21-23, 2018
Volunteer *Raleigh, NC*

- Volunteered at the All Things Open open source conference

NC-LSAMP Undergraduate Research Conference November 11, 2017
Student Networking Volunteer *Raleigh, NC*

- Hosted a table during the networking session at the North Carolina Louis Stokes Alliance for Minority Participation Undergraduate Research Conference to speak to students and answer questions about graduate school

All Things Open October 23-24, 2017
Volunteer *Raleigh, NC*

- Volunteered at the All Things Open open source conference

Visual Languages and Human-Centric Computing October 10-13, 2017
Student Volunteer *Raleigh, NC*

- Volunteer for the Blocks and Beyond workshop and VL/HCC 2017 conference hosted in Raleigh, NC

Open Source 101 February 4, 2017
Volunteer *Raleigh, NC*

- Volunteered at the Open Source 101 open source conference

All Things Open October 26-27, 2016
Volunteer *Raleigh, NC*

- Volunteered at the All Things Open open source conference

Big Brothers Big Sisters October 2014 - July 2015
Big Brother *Charlotte, NC*

³<https://www.leadershape.org/>

- Volunteered as a mentor for Big Brothers Big Sisters of Greater Charlotte

HONORS AND AWARDS

DevConf Diversity Travel Scholarship

Red Hat

June 25, 2019

Boston, MA

- Received travel support to attend DevConf

NSF Travel Award

National Science Foundation

March 27, 2019

Montreal, QC, Canada

- Received travel support to attend ICSE 2019

Graduate Merit Award

North Carolina State University

August 2015

Raleigh, NC

- Received a graduate merit award for the CSC department at NC State

Goldman Sachs Research Scholar

Goldman Sachs

Summer 2012

Durham, NC

- Undergraduate summer research funded by Goldman Sachs

Computer Science Undergraduate Research Fellowship

Duke University

May 2012 - May 2013

Durham, NC

- Accepted into the Duke CSURF program to conduct undergraduate research with Dr. Susan Rodger

TECHNICAL SKILLS

Red Hat Enterprise Linux 7 Certified System Administrator

NC State Linux Users Group

Python Software Foundation

Linux Foundation

ACM and IEEE student member

Programming Languages

Python, Java, C, C++, C#, Ruby, JavaScript, Bash, HTML, SQL

Tools and Technologies

Git, Ansible, Jenkins, Linux, Windows, LaTeX, Android