

Nischal Shrestha

NC State University
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INTERESTS

Software Engineering, Programming Languages, Human-Computer Interaction, Data Science.

EDUCATION

- 2016-Present:** **Ph.D. in Computer Science**, NC State University
- Advisor: [Dr. Chris Parnin](#)
 - **Thesis:** Rapid expertise in data science can be aided by interactive tutorials which provide explicit instruction, exploration and guards against misconceptions, and a community of practice which supports motivation and provides real world experience to better prepare novices for data science work.
- 2016-2018:** **M.Sc. in Computer Science**, NC State University
- 2011-2015:** **B.S. in Computer Science**, NC State University

TECHNICAL SKILLS

Programming: Python, R, Java, HTML, CSS, JavaScript, Android, MySQL, LaTeX
Research: Experimental Research Design, Qualitative & Quantitative analysis
Software: Visual Studio Code, RStudio IDE, Jupyter Notebook, Git, GitHub

SELECTED PUBLICATIONS

- Conference Paper [Remote, but connected: How #TidyTuesday Provides an Online Community of Practice for Data Scientists](#)
Nischal Shrestha, Titus Barik, Chris Parnin. CSCW 2021.
- Conference Paper [Here we go again: Why Is It Difficult for Developers to Learn Another Programming Language?](#)
Nischal Shrestha, Colton Botta, Titus Barik, Chris Parnin. ICSE 2020.
- Conference Paper [Instrument Designs for Validating Cross-Language Behavioral Differences](#)
Nischal Shrestha, Chris Parnin. VL/HCC 2019.
- Conference Paper [It's Like Python But: Supporting Transfer of Programming Language Knowledge.](#)
Nischal Shrestha, Titus Barik, Chris Parnin. VL/HCC 2018.

EXPERIENCE

- 2018-Present:** Graduate Research Assistant
- Researching learning transfer issues for programming languages (PhD Advisor: Dr. Chris Parnin)
- 2020-Present:** Python Intern at RStudio, PBC.
- Developed the infrastructure and tooling for the [learnr](#) package by [adding](#) Python and multi-language support for interactive tutorials.
 - Coordinated with software engineers to enhance both the [learnr](#) and the [gradethis](#) package for automated grading for data science.
 - Leading the development of [ggcheck](#), an automated grader for plots.
- 2016-2017:** Android Intern at WillowTree, Inc.
- Worked on an Android application for a live video streaming application called [Halogen](#) for Halogen Networks, LLC
 - Gained experience using the MVVM architecture
- 2016-2017:** Graduate Research Assistant (Advisor: Dr. Robert St. Amant)
- Researched human error and cognitive models for prediction
 - Extended a cognitive modeling tool called Cogulator to allow for [selection rules](#) in GOMS (Goals Operators Methods and Selection Rules) modeling
- 2016:** Android Intern at WillowTree, Inc.
- Developed an Android application for AccuWeather
 - Implemented a widget from scratch using best Android practices
- 2015 - 2016:** Android/Web Programmer at NC State University
- Optimized a visual recognition game in Android with Drs. Benjamin Watson, Patrick FitzGerald, Christian Holljes, and Masters student, Shaun Kurian

AWARDS AND HONORS

- ACM SIGSOFT Distinguished Paper Award:** ICSE 2020.
- Consortium Award:** VL/HCC 2018.
- Dean's List:** Spring 2012, Spring & Fall 2014, Spring 2015

PRESENTATIONS

- 2020:** *Here We Go Again: Why Why Is It Difficult for Developers to Learn Another Programming Language?* ICSE 2020, Virtual.
- 2019:** *Instrument Designs for Validating Cross-Language Behavioral Differences* VL/HCC 2019, Memphis, TN.
- 2018:** *It's Like Python But: Supporting Transfer of Programming Language Knowledge.* VL/HCC 2018, Lisbon, Portugal.
- Towards Supporting Knowledge Transfer of Programming Languages.* Knowledge. Graduate Consortium, VL/HCC 2018, Lisbon, Portugal.

TEACHING

- Summer, 2019:** CSC 116: Instructor
- Summer, 2018:** REU: Science of Software (Mentor)
- Fall, 2017 & Spring, 2018:** CSC 116: Introduction to Computing - Java (Teaching Assistant)
- Fall, 2016:** CSC 216: Programming Concepts in Java (Teaching Assistant/Lab Instructor)

SERVICE

- 2018:** Reviewer, VISSOFT 2018 Artifact Evaluation Track Program Committee

REFERENCES

Dr. Christopher Parnin [Ph.D. Advisor]
North Carolina State University
Email: cjparnin@ncsu.edu
Website: <http://chrisparnin.me/>

Dr. Alison Hill
RStudio, PBC
Website: <https://alison.rbind.io>

Dr. Titus Barik
Microsoft, Redmond
Email: Titus.Barik@microsoft.com
Website: <https://www.barik.net>

Dr. Greg Wilson
RStudio, PBC
Website: <https://third-bit.com>