

Rui Bai

ASSISTANT PROFESSOR OF THE PRACTICE
Department of Computer Science · Vanderbilt University
✉ rui.bai@vanderbilt.edu | 🏠 ginabai.github.io

Education

North Carolina State University

Raleigh, NC

PH.D. IN COMPUTER SCIENCE

June 2022

- Advisor: Dr. Kathryn T. Stolee
- Dissertation: Improving Student Testing Practices through a Lightweight Checklist Intervention
- Committee: Dr. Kathryn Stolee, Dr. Sarah Heckman, Dr. Thomas Price, Dr. Shiyang Jiang, Dr. Susan Fisk

Wake Forest University

Winston-Salem, NC

B.S. IN COMPUTER SCIENCE, MINOR IN MATHEMATICS

May 2016

- Magna Cum Laude

Employment History

Vanderbilt University

Nashville, TN

ASSISTANT PROFESSOR OF THE PRACTICE

Fall 2022 - Present

North Carolina State University

Raleigh, NC

GRADUATE RESEARCH ASSISTANT (SUPERVISED BY DR. KATHRYN T. STOLEE)

Fall 2016 - Summer 2022

INSTRUCTOR

Summer 2020, 2021

GRADUATE TEACHING ASSISTANT

Fall 2017, 2020

Mei & Mark LLP

Washington, DC

WEB SUPPORT SPECIALIST (VOLUNTEER)

Dec. 2016 - Present

Wake Forest University

Winston-Salem, NC

UNDERGRADUATE TEACHING ASSISTANT

Spring 2015

SUMMER RESEARCH FELLOW (SUPERVISED BY DR. PAÚL PAUCA)

Summer 2014

Teaching Experience

Vanderbilt University

Nashville, TN

INSTRUCTOR

Fall 2022 - Present

- **CS 1101 - Programming and Problem Solving**, 3 credit, undergraduate core course, Fall 2022

North Carolina State University

Raleigh, NC

INSTRUCTOR

Summer 2020, 2021

- **CSC 116: Introduction to Computing - Java**, 3 credit, undergraduate core course, Summer 2021, 35 students
 - Delivered lectures and supervised in-class labs synchronously online via Zoom
 - Flipped classroom; adapted course materials; managed undergraduate teaching assistant
 - Graded group projects; held office hours; provided assistance to students via emails and piazza posts
- **CSC 226: Discrete Mathematics for Computer Scientists**, 3 credit, undergraduate core course, Summer 2020, 21 students
 - Delivered lectures synchronously online via Zoom
 - Developed and adapted course materials; managed two graduate teaching assistants
 - Held office hours; provided assistance to students via emails and piazza posts

GRADUATE TEACHING ASSISTANT

Fall 2017, 2020

- **CSC 712/591: Software Testing**, 3 credit, graduate elective course (for Ph.D. and M.S. students), Fall 2020, 38 students
- **CSC 216: Programming Concepts - Java**, 4 credit, undergraduate core course, Fall 2017, 200+ students (25 in lab)

Publications [Peer-Reviewed]

Does Assertion Roulette Smell Bad? An Experiment from the Perspective of Testing Education

VL/HCC 2022

GINA R. BAI, KAI PRESLER-MARSHALL, SUSAN R. FISK, KATHRYN T. STOLEE.

- IEEE Symposium on Visual Languages and Human-Centric Computing

Check It Off: Exploring the Impact of a Checklist Intervention on the Quality of Student-written Unit Tests

ITICSE 2022

GINA R. BAI, KAI PRESLER-MARSHALL, THOMAS PRICE, KATHRYN T. STOLEE.

- ACM Conference on Innovation and Technology in Computer Science Education

How Students Unit Test: Perceptions, Practices, and Pitfalls

ITICSE 2021

GINA R. BAI, JUSTIN SMITH, KATHRYN T. STOLEE.

- ACM Conference on Innovation and Technology in Computer Science Education

How Graduate Computing Students Search When Using an Unfamiliar Programming Language

ICPC 2020

GINA R. BAI, JOSHUA KAYANI, KATHRYN T. STOLEE.

- IEEE/ACM International Conference on Program Comprehension

Improving Students' Testing Practices

ICSE Doc Sym 2020

GINA R. BAI.

- IEEE/ACM International Conference on Software Engineering - Doctoral Symposium

Exploring Tools and Strategies Used During Regular Expression Composition Tasks

ICPC 2019

GINA R. BAI, BRIAN CLEE, NISCHAL SHRESTHA, CARL CHAPMAN, CIMONE WRIGHT, KATHRYN T. STOLEE.

- IEEE/ACM International Conference on Program Comprehension

Investigating the Effects of Gender Bias on GitHub

ICSE 2019

NASIF IMTIAZ, JUSTIN MIDDLETON, JOYMALLYA CHAKRABORTY, NEILL ROBSON, GINA R. BAI, EMERSON MURPHY-HILL.

- IEEE/ACM International Conference on Software Engineering

Exploring Regular Expression Evolution

SANER 2019

PEIPEI WANG, GINA R. BAI, KATHRYN T. STOLEE.

- IEEE International Conference on Software Analysis, Evolution and Reengineering

Honors & Awards

2021 **Graduate Merit Award Recipient**, College of Engineering, North Carolina State University2018 **Grace Hopper Travel Scholarship Recipient**, NCSU-ACM-W (Women in Computer Science)2016-2017 **Graduate Research Award Recipient**, College of Engineering, North Carolina State University2014 **Research Fellowship Recipient**, Wake Forest University

Professional Service

Journal Reviewer

2022 **Manuscript Reviewer**, IEEE Transactions on Learning Technologies (TLT)

Other Service

2017-2020 **Graduate Relations Chair/Member**, NCSU-ACM-W (Women in Computer Science)

Raleigh, NC

Miscellaneous

Language English (fluent), Mandarin Chinese (fluent)**Honor Society** Upsilon Phi Epsilon (International Honor Societies for the Computing and Information Disciplines, invited 2015)