

Dr. Veronica Cateté

*Department of Computer Science
North Carolina State University*

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Education

- Ph.D.** in Computer Science North Carolina State University May 2018
Thesis: *A Framework for the Rapid Creation of Quality-Assured Programming Rubrics for New K-12 Computer Science Teachers.*
Committee: Dr. Tiffany Barnes, Dr. James Lester, Dr. Sarah Heckman, and Dr. Aaron Clark
- M.S.** in Computer Science University of North Carolina – Charlotte Aug 2012
Concentration: Intelligent & Interactive Systems; Mobile Game Design
- B.S.** in Computer Science North Carolina State University Dec 2010
Minor: *Science Technology & Society*; Honors: *Magna Cum Laude*
Research: Measuring affect in intelligent game-based learning environments.

Professional History

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|-----------------------------|---|----------------|
| Research Scientist | North Carolina State University, Raleigh | 2018 – Present |
| Graduate Research Assistant | North Carolina State University, Raleigh | 2012 – 2017 |
| Lead Researcher | Mothering Across Continents, Kigali, Rwanda | 2016, 2018 |
| Research Intern | Microsoft Research, Redmond, WA | 2014, 2015 |
| Graduate Research Assistant | University of North Carolina – Charlotte | 2011 – 2012 |

Research

Research Interests

K – 12 Computer Science Education, Game-Based Learning, Computer Science Outreach for Equity in Computing

Select Research Experience

- Game2Learn Lab Research Assistant (Dr. Tiffany Barnes) 2011-2017**
- Research on training novice teachers to identify computational thinking in student code
 - Assist in development and refinement of AP CS Principles Beauty & Joy of Computing (BJC) & run BJC professional development in conjunction with UC Berkeley
 - Lead developer, coordinator of monthly middle school outreach program (starting 2009)
 - Research variables affecting transition from middle school outreach to high school courses
- Pivot Academy Lead Researcher (Mothering Across Continents) 2016**
- Primary responsibilities include developing scalability partnerships with Rwanda Ministry of Education and Ministry of Youth ICT and conduct evaluations/follow-ups with STEM-ICT Academy
 - Curated content and trained leaders for Computer Science portion of week-long ‘Pivot Academy’, a STEM focused program for constructive learning (180 female participants)
- Microsoft Research – Connections Research Intern (Rane Johnson-Stempson) 2014**
- Using project Athena, developed two online resources for global distribution of CS Education: 20+ module game-centric AP CS Principles course and a 6-module science-themed middle school computing toolkit

Relevant Research Grant Awards & Management

DRL-1742351 Collaborative Research: Integrating computing in STEM - \$861,773 2018-2020
Research Coordinator, Project Manager

- Meets with co-PIs & directs graduate research and curriculum development
- Manages relations with K-12 research partner schools and professional development attendees
- Leads computational thinking boot camp for STEM teachers

IIS-1659745 REU Site: Socially Relevant Computing and Analytics - \$360,000 2017-2019
Project Manager, grant editing

- Manages NCSU's REU site coordinating faculty mentors in the application and review process
- Handles all applicant onboarding, housing, and university logistics
- Creates & delivers research skills workshops (question development, reading & writing research papers, evaluating projects, ethics, etc.)

STARS Student Leadership Corps: SPARCS - \$26,000 2013-2016
Project Manager, Mini-grants

- Awarded three mini-grants to carry out CS Outreach to middle school students
- Managed funds for equipment and operating costs as well as student stipends

National Science Foundation Graduate Research Fellowship - \$132,000 2012-2015
Principle Investigator

- Proposal: Using a modified AP Computer Science Curriculum during Middle School to Increase Enrollment of Minority Women in High School Computing Classes
- Modularized an existing CS outreach curriculum and enhanced it with advanced lessons on OOP and interactive media (games, mobile apps, etc)
- Trained 2 dozen mentors to replicate the program across 6 different systems
- 500+ students completed the outreach program, initial longitudinal data shows 85% transfer

Select Publications

Cateté, V., Lytle, N., Dong, Y., Boulden, D., Akram, B., Houchins, J., Barnes, T., Wiebe, T., Lester, J., Mott, B. and Boyer, K. et al. Infusing Computational Thinking into Middle Grade Science Classrooms: Lessons Learned. *Workshop in Primary and Secondary Computing Education (WiPSCE)*. 2018.

(Best Paper Nominee) Cateté, V., and Barnes, T. "Application of the Delphi Method in Computer Science Principles Rubric Creation." *International Conference on Innovation and Technology in Computer Science Education (ITiCSE)*. 2017. (32% acceptance rate; 56/175 full papers)

Price, T., Liu, Z., **Cateté, V.** and Barnes, T. "Factors Influencing Students' Help-Seeking Behavior while Programming with Human and Computer Tutors." *International Computing Education Research (ICER) Conference*. 2017. (27% acceptance rate; 29/108 full papers)

Price, T., **Cateté, V.**, Albert, J., and Barnes, T., Garcia, D. "Lessons Learned from "BJC" CS Principles Professional Development." *ACM Special Interest Group on Computer Science Education (SIGCSE)*. 2016. (35.4% acceptance rate; 105/297 full papers)

Awards & Recognition (items in bold indicate awards relevant to Expanding CS Education)

Best Paper Nominee – **ITiCSE 2016, 2017**, and FDG 2014.

2018 Outstanding Dissertation Award, NCSU Department of Computer Science

2018 Graduate Student Leadership Award, NCSU Department of Computer Science

2017 Equity for Women Award, NCSU Council on the Status of Women

2016 Deborah S. Moore Outstanding Student Volunteer Award, NCSU

2012 Centennial Campus Partnership Award, NCSU

2012 Microsoft Research Graduate Women's Scholarship, Microsoft Research

2012 NSF Graduate Research Fellowship, National Science Foundation