# YANYAN REN

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# **EDUCATION**

#### **Brown University**

September 2018 – current

• 1st year Computer Science PhD student

## **Swarthmore College**

September 2014 – May 2018

• Major: Computer Science, Minor: Educational Studies

• GPA: 3.7/4.0

## RESEARCH EXPERIENCE

Independent Study, Educational Psychology Lab, Swarthmore College, PA

September 2017 - May 2018

• Coauthoring a literature review on role of creativity in introductory programming courses

Research Assistant, Programming Languages Team, Brown University, RI

June 2017 - August 2017

- Implemented a tool that automatically turns Bootstrap's existing textbook into step-by-step, interactive tutorial. Bootstrap is a series of research-based computing curricular modules for grades 6-12.
- Studied participants' behavior in Bootstrap's teacher training workshops, and proposed observation protocols to understand stages of learning in a workshop, with a list of behaviors that indicate mastering of computational thinking.

Research Assistant, Educational Arcade, Massachusetts Institute of Technology, MA

March 2017 - May 2017

• Implemented live compilation for StarLogo Nova, making it more intuitive and efficient, as changes to the code are reflected right away automatically instead of requiring recompile from scratch. StarLogo Nova is a programming environment that allows students to simulate complex system.

Research Assistant, Educational Psychology Lab, Swarthmore College, PA

June 2016 - January 2017

• Assisted Professor Ann Renninger to write a literature review on motivation, engagement, and interest in learning science.

#### Volunteer Researcher, Wallingford Elementary School, PA

October 2015 - March 2016

- Helped fourth-grade students use CueThink, an iPad application to improve math problem solving skills.
- Wrote an observation summary on how the app worked in the classroom, and helped CueThink's software developers to identify potential product improvements.

## **TEACHING EXPERIENCE**

# Lab Assistant, Swarthmore College, PA

October 2017 - May 2018

• Helped Educational Psychology students choose correct models in SPSS, a statistical analysis software, a to analyze and interpret data for their research projects.

# Teaching Assistant, Wallingford Elementary School, PA

February 2015 - May 2018

- Helped third graders debug Scratch programs and guided them to talk like programmers.
- Led advanced first graders to work on creative math activities.

## Teaching Assistant, Swarthmore College, PA

June 2016 - July 2016

- Helped fifth graders doing experiments and homework in Science for Kids, a summer science workshop.
- Under the guidance of Professor Renninger, wrote a report on tips to improve the program, for example by guiding Teaching Assistant to represent their identity as scientists to inspire the kids.

#### Grader, Swarthmore College, PA

September 2015 - December 2015

• Graded homework for Discrete Math. Identified the exact spot where students made mistakes in their mathematical proofs, and suggested improvements.

#### Information Technology Associate, Swarthmore College, PA

June 2015 – December 2016

• Technical troubleshooting for non-technical students, faculty and staff.