

# KRISTIN STEPHENS-MARTINEZ

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Department of Computer Science  
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## EDUCATION

*Doctor of Philosophy*, Computer Science  
University of California, Berkeley      GPA 3.955      December 2017  
Advisor: Armando Fox

*Master of Science*, Computer Science  
University of California, Berkeley      GPA 3.955      December 2013  
Advisor: Vern Paxson

*Bachelor of Science*, Computer Science  
University of Maryland, College Park      GPA 4.0      May 2009  
Summa Cum Laude

## PROFESSIONAL APPOINTMENTS

**Assistant Professor of the Practice** (Duke University)      Dec 2017 - Now

### Head Teaching Assistant

CS169 with Armando Fox (University of California, Berkeley)      Fall 2016

### Graduate Teaching Assistant

CS61A with Paul Hilfinger (University of California, Berkeley)      Spring 2016  
CS61A with John DeNero (University of California, Berkeley)      Fall 2015  
CS194-25 with Dawn Song (University of California, Berkeley)      Fall 2012  
EE122 with Scott Shenker (University of California, Berkeley)      Fall 2011  
CMSC198K with Bobby Bhattacharjee & Samir Khuller (University of Maryland, College Park)      Fall 2009

### Undergraduate Teaching Assistant

CMSC131 with Jan Plane (University of Maryland, College Park)      Spring 2008  
CMSC106 with Jan Plane (University of Maryland, College Park)      Spring 2007

### Graduate Student Researcher

*Wrong answers and Hints* with Armando Fox (University of California, Berkeley)      May - Aug 2016, Jan - May 2017  
*KnowMap* with Dawn Song (University of California, Berkeley)      May - Dec 2012  
Work with Vern Paxson (University of California, Berkeley)  
    • *BGP Parser*      Jan - Aug 2011  
    • *HTTP Request Causation*      Jan - May 2012  
*Hoodnets* with Bobby Bhattacharjee (University of Maryland, College Park)      Aug 2009 - May 2010

### Undergraduate Student Researcher

*FindBugs* with Bill Pugh (University of Maryland, College Park)      May - Aug 2006, Jan - May 2007

### Software Engineer Intern

Coursera, *Quiz Statistics Visualization* (Mountain View, CA)      May - Aug 2014  
Stanford edX, *Instructor Dashboard* (Stanford, CA)      May - Aug 2013  
Google, *Google Doc Team* (New York, NY)      Jun - Aug 2010  
Google, *Internationalization Team* (Mountain View, CA)      Jun - Aug 2009  
Microsoft, *Excel Developer Team* (Redmond, WA)      May - Aug 2008

## PUBLICATIONS

### *Books and Manuscripts*

**Kristin Stephens-Martinez.** 2017. *Serving CS Formative Feedback on Assessments Using Simple and Practical Teacher-Bootstrapped Error Models*. Ph.D. Thesis. University of California, Berkeley.

### *Conferences*

**Kristin Stephens-Martinez** and Armando Fox. 2018. *Giving Hints is Complicated: Understanding the Challenges of an Automated Hint System Based on Frequent Wrong Answers*. ACM Conference on Innovation and Technology in Computer Science Education. (pp. 45-50) ITiCSE '18.

**Kristin Stephens-Martinez**, An Ju, Krishna Parashar, Regina Ongowarsito, Nikunj Jain, Sreesha Venkat, Armando Fox. 2017. *Taking Advantage of Scale by Analyzing Frequent Constructed-Response, Code Tracing Wrong Answers*. ACM International Computing Education Research. (pp. 56-64) ICER '17.

**Kristin Stephens-Martinez**, Marti A. Hearst, and Armando Fox. 2014. *Monitoring moocs: which information sources do instructors value?*. ACM Learning At Scale. (pp. 79-88) ACM L@S '14.

### *Posters*

**Kristin Stephens-Martinez**, An Ju, Colin Schoen, John DeNero, Armando Fox. 2016. *Identifying Student Misunderstandings using Constructed Responses*. Extended Abstract at ACM Learning At Scale. (pp. 153-156) L@S '16.

**Kristin Stephens**, Shaddi Hasan, and Yahel Ben-David. 2012. *MultiWAN: WAN Aggregation for Developing Regions*. ACM Symposium on Computing for Development. DEV '12.

Brian Cole, Dan Hakim, Dave Hovemeyer, Reuven Lazarus, William Pugh, and **Kristin Stephens**. 2006. *Improving your software using static analysis to find bugs*. In Companion to the 21st ACM SIGPLAN Symposium on Object-Oriented Programming Systems, Languages, and Applications. OOPSLA '06.

### *Birds of a Feather*

**Kristin Stephens-Martinez** and Brian Railing. 2019. *How can we make office hours better?* SIGCSE Technical Symposium on Computer Science Education. Feb 28, 2019. SIGCSE '19.

### *Unrefereed Reports*

**Kristin Stephens-Martinez.** 2013. *Towards Sound HTTP Request Causation Inference*. Master's Report. University of California, Berkeley.

## TEACHING

### *Duke University*

Date		Number	Title	Enrolled	Rating (5.0)	TAs
2018	Fall	CompSci 101 (Sec 1)	Introduction to Computer Science	182		36
	Fall	CompSci 101 (Sec 2)	Introduction to Computer Science	109		-
2018	Spring	CompSci 101 (Sec 2)	Introduction to Computer Science (Co-taught with Owen Astrachan (Sec 1))	104	3.28	31

### *University of California, Berkeley (Co-Instructor)*

Date		Number	Title	Enrolled	Rating (5.0)	TAs
2012	Fall	CS194-25	Special Topics: Build Your Next Gen Education Technology (Co-taught with Dawn Song)	13	5.0	0

**University of California, Berkeley (Graduate Teaching Assistant)**

Date		Number	Title	Rating (5.0)	TAs
2016	Fall	CS169	Software Engineering		5
	Spring	CS61A	The Structure and Interpretation of Computer Programs	4.9	
2015	Fall	CS61A	The Structure and Interpretation of Computer Programs	4.5	
2011	Fall	EE122	Introduction to Communication Networks	4.5	

**University of Maryland, College Park (Graduate Teaching Assistant)**

Date		Number	Title
2009	Fall	CMSC198K	The Science Behind Computing

**University of Maryland, College Park (Undergraduate Teaching Assistant)**

Date		Number	Title
2008	Spring	CMSC131	Object Oriented Programming I
2007	Fall	CMSC106	Intro to C Programming

**Course and Curriculum Development**

Ji Yeon Kim, Yesenia Velasco, and **Kristin Stephens-Martinez**. *Auto-grader Unittests for Compsci101 Assignments*. 2018. Compsci101. Duke University.

**Kristin Stephens-Martinez**. *Curriculum for “Build Your Next Gen Education Technology*. 2012. CS194-25. University of California, Berkeley.

**STUDENTS****Duke University***Master’s*

- Ji Yeon Kim - “Help seeking behavior of struggling students” August 2018 - Now

*Undergrad*

- Man-Lin Hsiao, “Breadcrumbs: Analyzing Classroom Data” Summer 2018
- Liam Pulsifer, “Breadcrumbs: Analyzing Classroom Data” Summer 2018

*PhD, Research Initial Project Committee Member*

- Zhengjie Miao (advisors: Jun Yang and Sudeepa Roy) Spring 2018

**University of California, Berkeley (All Undergrad)**

- Anwar Baroudi, “Do student like and remember hints?” Spring 2018
- Maia Rosengarten, “Do student like and remember hints?” Spring 2018
- Nikunj Jain Fall 2016, Spring 2017, Summer 2017
  - “Quantitative Analysis of Code-Tracing Wrong Answers”
  - “Delivering Hints to Students Based on Wrong Answers”
- Sreesha Venkat Fall 2016, Spring 2017
  - “Qualitative Analysis of Code-Tracing Wrong Answers”
  - “Delivering Hints to Students Based on Wrong Answers”
- Regina Ongowarsito Summer 2016, Fall 2016, Spring 2017
  - “Qualitative Analysis of Code-Tracing Wrong Answers”
  - “Delivering Hints to Students Based on Wrong Answers”
- Krishna Parashar Summer 2016, Fall 2016, Spring 2017
  - “Qualitative Analysis of Code-Tracing Wrong Answers”
  - “Delivering Hints to Students Based on Wrong Answers”
- Steven Chi, “Predicting Struggling Students from Student Answers” Spring 2016, Summer 2016
- Spenser Chiang, “OK.py Feature: Hints” Spring 2016
- Hayden Sheung, “OK.py Feature: Hints” Spring 2016

- Kelly Liu, “Qualitative Analysis of Code-Tracing Wrong Answers” Spring 2016
- Hannah Huang, “Qualitative Analysis of Code-Tracing Wrong Answers” Fall 2015, Spring 2016
- Michelle Tian, “Qualitative Analysis of Code-Tracing Wrong Answers” Fall 2015

## **ACADEMIC SERVICE**

### **Duke University**

- Computer Science Dept. Communications Committee Dec 2018 - Present
- Computer Science Advisor Aug 2018 - Present
  - 2018-2019 year: 27 students
- College Advisor Aug 2018 - Present
  - 2018-2019 year: 3 students

### **Conference Reviewer**

SIGCSE Technical Symposium 2018  
L@S 2017

### **Grant Proposal Reviewer**

National Science Foundation Panelist for CSforAll (11 Proposals) June 2018

### **University of California, Berkeley**

- EECS Peers
  - Member Aug 2015 - May 2017
  - CS-Coordinator and Founder Aug 2013 - May 2015
- Graduate and Undergraduate Mentoring Jan 2010 - May 2017
  - 10 graduate and 13 undergraduate students
- Teaching Conference for First-Time GSIs, Session Facilitator Jan 13, 2017
- Admissions Committee, Education Area Reader 2016, 2017
- Admissions Committee, Diversity Reader 2013, 2014
- Women In Computer Science and Electrical engineering (WICSE), Co-President Aug 2012 - May 2013

### **University of Maryland, College Park**

- Association for Women in Computing (AWC)
  - Co-Chair Aug 2008 - May 2009
  - Treasurer Aug 2007 - May 2008
- CS Ambassador Aug 2008 - May 2009
- PRIME Scholar Aug 2006 - Dec 2007

## **TALKS**

- “How Can Data from Large Classrooms Improve Learning?,” Behavioral Research Informing Teaching Excellence, Duke University, Durham, NC, Dec 4, 2018.
- “Teaching as a Career,” Compsci 701: Introduction to Graduate Study, Duke University, Durham, NC, Nov 9, 2018.
- “Giving Hints is Complicated: Understanding the Challenges of an Automated Hint System Based on Frequent Wrong Answers,” Project Search Pre-Orientation program, Duke University, Durham, NC, Aug 13, 2018.

## **MEMBERSHIPS**

Special Interest Group on Computer Science Education (SIGCSE) 2018 - Present  
Association for Computing Machinery (ACM) 2008 - Present

**HONORS AND AWARDS**

**University of California, Berkeley**

Outstanding Graduate Student Instructor	2012-2013
National Science Foundation Fellowship	2010
University of California, Berkeley Chancellor's Fellowship	2010

**University of Maryland, College Park**

Outstanding Undergraduate for The College of Computational, Mathematical, and Physical Sciences	2009
CS Teaching Excellence Award for an Undergraduate Teaching Assistant	2009