

KRISTIN STEPHENS-MARTINEZ

Duke University
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

Co-Instructor

CS194-25 with Dawn Song (University of California, Berkeley) Fall 2012

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
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 May - Aug 2016, Jan - May 2017
(University of California, Berkeley)
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

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| Coursera, <i>Quiz Statistics Visualization</i> (Mountain View, CA) | May - Aug 2014 |
| Stanford edX, <i>Instructor Dashboard</i> (Stanford, CA) | May - Aug 2013 |
| Google, <i>Google Doc Team</i> (New York, NY) | Jun - Aug 2010 |
| Google, <i>Internationalization Team</i> (Mountain View, CA) | Jun - Aug 2009 |
| Microsoft, <i>Excel Developer Team</i> (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

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

HONORS AND AWARDS

University of California, Berkeley

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

University of Maryland, College Park

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