

February 7, 2026

## KRISTIN STEPHENS-MARTINEZ

Duke University  
Department of Computer Science  
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### EDUCATION

*Doctor of Philosophy*, Computer Science (Advisor: Armando Fox)  
University of California, Berkeley December 2017  
Thesis: *Serving CS Formative Feedback on Assessments Using Simple and Practical Teacher-Bootstrapped Error Models*

*Master of Science*, Computer Science (Advisor: Vern Paxson)  
University of California, Berkeley December 2013  
Report: *Towards Sound HTTP Request Causation Inference*

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

### PROFESSIONAL APPOINTMENTS

**Associate Director of Undergraduate Studies** (Duke University) Jul 2024 - Now  
**Associate Professor of the Practice** (Duke University) Jan 2024 - Now  
**Assistant Professor of the Practice** (Duke University) Dec 2017 - Dec 2023  
**Associate Director of Undergraduate Studies** (Duke University) Jul 2021 - Jun 2022

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

**Head/Graduate/Undergraduate Teaching Assistant**  
See Teaching section for details

**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**

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
Oil Price Information Services (OPIS), Developer Team (Rockville, MD)	May - Aug 2008

**HONORS AND AWARDS****Duke University**

Robert B. Cox Undergraduate Teaching Award - Duke University, Trinity College of Arts & Sciences 2025

**University of California, Berkeley**

Outstanding Graduate Student Instructor	2012-2013
National Science Foundation Graduate Research 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

**PUBLICATIONS***Journals*

Shao-Heng Ko and **Kristin Stephens-Martinez**. 2025. *Rethinking computing students' help resource utilization through sequentiality*. ACM Transactions on Computing Education. TOCE '25. <https://doi.org/10.1145/3716860>

*Conferences*

Shao-Heng Ko, **Kristin Stephens-Martinez**. 2026. *Connecting Computing Students' External Help Resource Preferences and Internal Help Resource Usage: 2021-2025*. In Proceedings of the 57th ACM Technical Symposium on Computer Science Education. SIGCSE '26.

Alex Chao, Janet Jiang, **Kristin Stephens-Martinez**. 2026, *How Shared Gender Identity with Teaching Assistants Relates to Student Outcomes in an Undergraduate Algorithms Course*. In Proceedings of the 57th ACM Technical Symposium on Computer Science Education. SIGCSE '26.

Shao-Heng Ko, Matthew Zahn, **Kristin Stephens-Martinez**, Yesenia Velasco, Lina Battestilli, and Sarah Heckman. 2025. *Relationships Between Computing Students' Characteristics, Help-Seeking Approaches, and Help-Seeking Behavior in Introductory Courses and Beyond*. ACM Conference on International Computing Education Research. ICER '25

Shao-Heng Ko and **Kristin Stephens-Martinez**. 2025. *Prior What Experience? The Relationship Between Prior Experience and Student Help-Seeking Beyond CS1*. ACM Conference on Innovation and Technology in Computer Science Education. ITiCSE '25.

Shao-Heng Ko, **Kristin Stephens-Martinez**, Matthew Zahn, Yesenia Velasco, Lina Battestilli, and Sarah Heckman. 2025. *Student Perceptions of the Help Resource Landscape*. In Proceedings of the 56nd ACM Technical Symposium on Computer Science Education. SIGCSE '25.

Shao-Heng Ko and **Kristin Stephens-Martinez**. 2024. *The Trees in the Forest: Characterizing Computing Students' Individual Help-Seeking Approaches*. ACM International Computing Education Research. ICER '24. (20.1% acceptance)

Shao-Heng Ko and **Kristin Stephens-Martinez**. 2023. *What Drives Students to Office Hours: Individual Differences and Similarities*. In Proceedings of the 54nd ACM Technical Symposium on Computer Science Education. SIGCSE '23. (35% acceptance)

Anshul Shah, Jonathan Liu, **Kristin Stephens-Martinez**, and Susan H. Rodger. 2021. *The CS1 Reviewer App: Choose Your Own Adventure or Choose for Me!*. In Proceedings of the 26th ACM Conference on Innovation and Technology in Computer Science Education. (pp 331-337) ITiCSE '21. (30.5% acceptance)

**Kristin Stephens-Martinez**. 2021. *A Study of the Relationship Between a CS1 Student's Gender and Performance Versus Gauging Understanding and Study Tactics*. In Proceedings of the 52nd ACM Technical Symposium on Computer Science Education. (pp 679-685) SIGCSE '21. (31% acceptance)

**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**

Salma El Otmani , Janet Jian, Shao-Heng Ko, and **Kristin Stephens-Martinez**. 2024. *The Relationships Between Modality, Peer Instruction Discussion, and Class Sentiment in Hybrid Courses*. Extended Abstract at ACM SIGCSE Technical Symposium on Computer Science Education. SIGCSE '24. (60% acceptance)

Sadhana Suryadevara and **Kristin Stephens-Martinez**. 2022. *UPIC a Problem-Solving Framework: Understand, Plan, Implement, and Correctness/Debugging*. Extended Abstract at ACM Conference on International Computing Education Research. ICER '22.

Amogh Mannekote, Mehmet Celepkolu, Aisha Chung Galdo, Kristy Elizabeth Boyer, Maya Israel, Sarah Heckman, **Kristin Stephens-Martinez**. 2022. *Don't Just Paste Your Stacktrace: Shaping Discussion Forums in Introductory CS Courses*. Extended Abstract at ACM SIGCSE Technical Symposium on Computer Science Education. SIGCSE '22. (64% acceptance)

**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.

### **Articles**

**Kristin Stephens-Martinez**. 2021. *The CS-Ed Podcast Season 2*. ACM SIGCSE Bulletin, Vol. 53, No. 1, page 6, January 2021.

**Kristin Stephens-Martinez**. 2020. *The CS-Ed Podcast*. ACM SIGCSE Bulletin, Vol. 52, No. 1, page 12, January 2020.

### **Panels and Special Sessions**

Paul Denny, Juho Leinonen, Viraj Kumar, Steven Gordon, Anastasiia Birillo, Stephen MacNeil, **Kristin Stephens-Martinez**, Mark Liffiton, David H. Smith, Sverrir Thorgeirsson. 2026. *ACM Generative AI Task Force Special Session: Teaching with Generative AI: Tools You Can Use Today*. SIGCSE Technical Symposium on Computer Science Education. SIGCSE '26.

Brett Wortzman , **Kristin Stephens-Martinez**, Mia Minnes, Oluwakemi Ola, Adam Blank. 2023. *Who's Cheating Whom? Changing the Narrative Around Academic Misconduct*. SIGCSE Technical Symposium on Computer Science Education. SIGCSE '23. (39% acceptance)

Dan Garcia , Jim Huggins, Lauren Bricker, Adam Gaweda, David J. Malan, Joël Porquet-Lupine, **Kristin Stephens-Martinez**. 2023. *It Seemed Like a Good Idea at the Time ("Let Me Help You with That" edition)*. SIGCSE Technical Symposium on Computer Science Education. SIGCSE '23. (39% acceptance)

Dan Garcia, Zelda Allison, Abigail Joseph, David Malan, **Kristin Stephens-Martinez**. 2022. *Technology We Can't Live Without! (COVID-19 edition)*. SIGCSE Technical Symposium on Computer Science Education. SIGCSE '22. (58% acceptance)

**Kristin Stephens-Martinez**, Manuel A. Pérez-Quiñones, Nicki Washington, and Leigh Ann DeLyser. 2021. *Where Should We Go From Here? Eliminating Inequities In CS Education, Featuring Guests From The CS-Ed Podcast*. SIGCSE Technical Symposium on Computer Science Education. SIGCSE '21.

### **Demos**

Yihao Hu, Zhengjie Miao, Zhiming Leong, Haechan Lim, Zachary Zheng, Sudeepa Roy, **Kristin Stephens-Martinez**, and Jun Yang. 2022. *I-Rex: An Interactive Relational Query Debugger for SQL*. Abstract at ACM SIGCSE Technical Symposium on Computer Science Education. SIGCSE '22. (48% acceptance)

### **Birds of a Feathers**

Kevin Lin, Brian Railing, and **Kristin Stephens-Martinez**. 2021. *How can we make office hours better?*. SIGCSE Technical Symposium on Computer Science Education. SIGCSE '21. (88% acceptance)

**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.

### **Artifacts**

**Kristin Stephens-Martinez**. 2018. *Learning Innovation Blog: "Planning a Course Calendar"*. <https://learninginnovation.duke.edu/blog/2018/08/planning-a-course-calendar/>

### **The CS-Ed Podcast**

My podcast where I talk about teaching computer science with computer science educators. Episodes are 30-45 minute. Listen totals are as of 1/1/26 from Spotify, Apple Podcasts, and YouTube Podcasts. <https://csedpodcast.org/>

Season	When Published	# Episodes	Total Listens
1	2019-2020	6	3,053
2	2021	6	1,902
3	2022-2023	12	2,148
4	2023-2025	12	1,525

Blog

<https://ksm-cs.blogspot.com/> OR <https://ksm-csed.medium.com/>

Year Posted	# Posts	Total Views*	Topics
2019	9	8,011	Conference reflection, grant writing reflection, how I stay organized, and teaching
2020	8	4,286	My webinar “How to Create and Use Formative Assessments at Scale”, conference reflection, how I organize the teaching staff of my 200+ student class, getting organized
2021	8	1,416	Semester theme, conference reflections, teaching reflections, teaching techniques, ITiCSE paper, other podcasts
2022	9	2,414	Grad school application advice, teaching reflection, reflections as conference’s hybrid chair, teaching practices
2023	7	3,479	Teaching practices, research lab practices, reflections as a conference’s hybrid chair, time management
2024	5	1,466	Teaching practices, productivity practices, generative AI + teaching
2025	4	619	Teaching practices, useful metaphors, professor workload

\* For all posts on both platforms from that year for all time as of 1/01/26.

**TEACHING***Duke University*

Date	Number	Title	Enrolled	TAs/UTAs
2026	Spring CompSci 216	Everything Data	120	2/14
2025	Fall CompSci 216	Everything Data	77	2/9
2025	Fall CompSci/Educ 171CN	Learning How to Learn with AI	24	1/2
2025	Spring CompSci 216	Everything Data	113	3/15
2025	Spring CompSci 590	Computing Education Research	8	0
2024	Fall CompSci 216	Everything Data	88	2/12
2024	Spring CompSci 216	Everything Data	160	2/13
2023	Fall CompSci 216	Everything Data	82	2/10
2023	Spring CompSci 216	Everything Data	234	3/21
2022	Fall CompSci 216	Everything Data	208	2/10
2022	Fall CompSci 290	Computing Education Research	15	0
2022	Spring CompSci 216	Everything Data	208	2.5/10
2022	Spring CompSci 290	Computing Education Research	14	0
2021	Fall CompSci 116	Foundations of Data Science	38	1/2
2021	Fall CompSci 216	Everything Data	198	2/10
2021	Spring CompSci 201 (Co-taught with Brandon Fain)	Data Structures and Algorithms	276	2/31
2021	Spring CompSci 216 (Co-taught with Brandon Fain)	Everything Data	217	2/9
2020	Spring CompSci 249 (Co-taught with Susan Rodger)	CompSci Ed Research	10	0
2020	Spring CompSci 101	Introduction to Computer Science	170	2/20
2019	Fall CompSci 249 (Co-taught with Susan Rodger and Robert Duvall)	CompSci Ed Research	10	0
2019	Fall CompSci 116	Foundations of Data Science	32	1/3
2019	Fall CompSci 101	Introduction to Computer Science	254	2/30
2019	Spring CompSci 101 Sec1	Introduction to Computer Science	130	2/28
	Spring CompSci 101 Sec2	Introduction to Computer Science	94	-
2018	Fall CompSci 101 Sec1	Introduction to Computer Science	182	2/34
	Fall CompSci 101 Sec2	Introduction to Computer Science	109	-
2018	Spring CompSci 101 Sec2 (Co-taught with Owen Astrachan (Sec 1))	Introduction to Computer Science	104	2/29

*Notes:*

Fall 2020: Parental leave

TA - Graduate Teaching Assistant, UTA - Undergraduate Teaching Assistant

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

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

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

Date	Number	Title
2016	Fall	CS169 Software Engineering (Armando Fox, Head Grad TA of 5 Undergrad TAs)
	Spring	CS61A The Structure and Interpretation of Computer Programs (Paul Hilfinger)
2015	Fall	CS61A The Structure and Interpretation of Computer Programs (John DeNero)
2011	Fall	EE122 Introduction to Communication Networks (Scott Shenker)

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

Date	Number	Title
2009 Fall	CMSC198K	The Science Behind Computing (Bobby Bhattacharjee & Samir Khuller)

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

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

***Course and Curriculum Development***

**Kristin Stephens-Martinez** *Learning How to Learn With AI.* First-Year Only Course. 2025. CompSci171CN (cross-listed with Educ). Duke University.

**Kristin Stephens-Martinez** *Computing Education Research.* Graduate Course. 2025. CompSci590. Duke University.

Susan Rodger, **Kristin Stephens-Martinez**, and Yesenia Velasco (alphabetical order). And guest Esther Brown. *Practical Python: Start Your Programming Journey.* Online 4-week Course. 2025. Coursera.

**Kristin Stephens-Martinez** *Computing Education Research.* Course. 2022. CompSci290. Duke University.

Robert Duvall, Susan Rodger, and **Kristin Stephens-Martinez** (alphabetical order). *Curriculum for Undergraduate Teaching Assistant Training.* 2019. CompSci249. Duke University.

Ji Yeon Kim, Yesenia Velasco, and **Kristin Stephens-Martinez**. *Auto-grader Unitests for Compsci101 Assignments.* 2018. CompSci101. Duke University.

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

## GRANTS

“AI Learning Companion for Applied Machine Learning,” The Center for Computational Thinking, Duke University, \$21,322, July 2024 - June 2025 (with Brandon Fain and Robert Duvall).

“Collaborative Research: Characterizing and empowering student success when traversing the academic help landscape,” #2336805, National Science Foundation: Division of Undergraduate Education (DUE), \$700,000, May 2024 - April 2027 (with Yesenia Velasco, Sarah Heckman, and Lina Battestilli). **Stephens-Martinez part \$324,986.**

REU Supplement to “CUE: Collaborative Research: Effective Peer Teaching Across Computing Pathways,” #1934965, National Science Foundation: Improving Undergraduate STEM Education: Computing in Undergraduate Education (IUSE: CUE), \$5,000, Summer 2021.

REU Supplement to “CUE: Collaborative Research: Effective Peer Teaching Across Computing Pathways,” #1934965, National Science Foundation: Improving Undergraduate STEM Education: Computing in Undergraduate Education (IUSE: CUE), \$10,000, Summer 2020.

“III: Small:HNRQ: Helping Novices Learn and Debug Relational Queries,” #2008107, National Science Foundation: IIS, \$500,000, October 2020 - September 2023 (with Jun Yang and Sudeepa Roy).

“CUE: Collaborative Research: Effective Peer Teaching Across Computing Pathways,” #1934965, National Science Foundation: Improving Undergraduate STEM Education: Computing in Undergraduate Education (IUSE: CUE), \$300,000, January 2020 - June 2023 (with Sarah Heckman, Lina Battestilli, Anna Howard, Kristy Boyer, Maya Israel, Ketan Mayer-Patel, David Gotz, and Karen Murphy). **Stephens-Martinez part \$76,055.**

“The CS-Ed Podcast,” SIGCSE Special Projects Grants, \$5,000, Year of 2019. (acceptance rate 15%)

## STUDENTS

### Duke University

#### *PhD's*

- |                  |                    |
|------------------|--------------------|
| 1. Owen Sizemore | Aug 2025 - Current |
| 2. Shao-Heng Ko  | Aug 2022 - Current |

#### *Master's*

- |  |                     |
|--|---------------------|
| 1. Alex Chao - “How Shared Gender Identity with TAs Relates to Student Outcomes” | Spring 2025         |
| 2. Ji Yeon Kim - “Student Paths in CS1: Case Studies of Initial Poor Performers” | Aug 2018 - May 2019 |

#### *Post Bachelor's*

- |  |                        |
|--|------------------------|
| 1. Jonathan Liu                              |                        |
| • “Ecological Belonging Intervention in CS1” | Fall 2024, Spring 2025 |
| • “CS101 Reviewer App”                       | Fall 2020, Spring 2021 |

#### *Undergrad*

- |   |                          |
|---|--------------------------|
| 1. Michelle Brown   |                          |
| • “Neurodivergence and Universal Design for Learning in Duke CS Courses”                    | Fall 2025, Spring 2026   |
| • “Duke Chat Bot”   | Fall 2024                |
| 2. Abby Melton, “Open-Ended Autograders for an Introductory Python”                         | Summer 2025, Spring 2026 |
| 3. Ricardo Urena, “Relationships between student learning beliefs and help-seeking in CS”   | Summer 2025, Spring 2026 |
| 4. Alex Pool, “Opting In (or Out): Patterns of Student Participation in Optional Groupwork” | Fall 2025, Spring 2026   |
| 5. Amir Aref (Berea College), “Open-Ended Autograders for an Introductory Python”           | Summer 2025              |
| 6. Bryanna Erickson (Berea College)   |                          |
| • “Open-Ended Autograders for Introductory Python”  | Summer 2025              |

7. Jerry Zou, "Open-Ended Autograders for an Introductory Python"	Summer 2025
8. Zehavi Rodriguez, "Demographic factors and self-assessment trajectories in intro CS"	Summer 2025
9. Kevin Alvarenga	
• "Duke Chat Bot"	Fall 2025
• "Open-Ended Autograders for Introductory Python" (DREU)	Summer 2024
10. Nikita Agarwal (Univ. of Wisconsin-Madison)	
• "Open-Ended Autograders for Introductory Python" (DREU)	Summer 2024
11. Arunima Suri (Univ. of IL Urbana-Champaign)	
• "Open-Ended Autograders for Introductory Python" (DREU)	Summer 2024
12. Divya Nataraj	
• "Exploring How Diversity and Other Factors Relate to Student Performance and Persistence in CS" (Independent Study, Thesis, Graduate with Highest Distinction)	Spring 2024
• "Diversity in Undergraduate Computing" (Independent Study, UR2PhD Program)	Fall 2023
13. Janet Jiang (Graduate with Highest Distinction)	
• "Ecological Belonging Intervention in CS1"	Fall 2024, Spring 2025
• "Peer Instruction in Hybrid Courses" (Independent Study)	Spring 2024
• "Diversity in Undergraduate Computing" (Independent Study, UR2PhD Program)	Fall 2023
• "Effectiveness of Hybrid Classes" (CS+ Program)	Summer 2023
14. Jerry He, "Effectiveness of Hybrid Classes" (CS+ Program)	Summer 2023
15. Salma El Otmani, "Effectiveness of Hybrid Classes" (CS+ Program)	Summer 2023
16. Rhea Tejwani, "Understanding the Efficacy of Office Hours in CS1"	
• (Thesis, Graduate with Distinction)	Spring 2023
17. Sara Mehta, "Factors that Influence Attitudes Toward Group Work in CS Classrooms"	
• (Independent Study, Thesis, Graduate with Distinction)	Fall 2022, Spring 2023
18. Belle Xu	
• "Understanding the Association between Student Behavior on Formative Assessments and Performance on Summative Assessments" (Independent Study, Thesis, Graduate with Distinction)	Fall 2022, Spring 2023
• "CS101 Reviewer App" (CS+ Program, Independent Study)	Summer 2021, Spring 2022
19. Bianca Saputra, "What CS1 Formative Assessments Tell Us"	
• (Thesis, Graduate with Distinction)	Fall 2021, Spring 2022
20. Sona Suryadevara	
• "Analyzing Office Hours Through the Lens of Gender and the Problem-Solving Process" (Thesis, Graduate with Distinction)	Fall 2021, Spring 2022
• "CS101 Reviewer App" (CS+ Program)	Summer 2021
21. Brian Janger, "CS101 Reviewer App" (CS+ Program)	Summer 2021
22. Manith Luthria, "CS101 Reviewer App" (CS+ Program)	Summer 2021
23. Eric Young	
• Duke Innovation & Entrepreneurship Certificate Program	Summer 2021
• "WWPD: What Will Python Do?" (CS+ Program)	Summer 2020
24. Andrew Elcock, "CS101 Reviewer App" (Independent Study)	Spring 2021
25. Anshul Shah, "CS101 Reviewer App" (Independent Study)	Spring 2020, Fall 2020, Spring 2021
26. Benjamin Stewart, "WWPD: What Will Python Do?" (CS+ Program)	Summer 2020
27. Frank Tang, "WWPD: What Will Python Do?" (CS+ Program)	Summer 2020
28. Jaylyn Barbee, "Breadcrumbs: Analyzing Classroom Data" (CS+ Program)	Summer 2019
29. Lucian Li, "Breadcrumbs: Analyzing Classroom Data" (CS+ Program)	Summer 2019
30. Man-Lin Hsiao, "Breadcrumbs: Analyzing Classroom Data"	Summer 2018
31. Liam Pulsifer, "Breadcrumbs: Analyzing Classroom Data"	Summer 2018

*PhD, Preliminary Exam Committee Member*

- |   |             |
|---|-------------|
| 1. Yihao Hu (advisor: Jun Yang)         | Spring 2023 |
| 2. Zhengjie Miao (advisor: Sudeepa Roy) | Spring 2020 |

*PhD, Research Initial Project Committee Member*

1. Yihao Hu (advisor: Jun Yang)
2. Zhengjie Miao (advisor: Sudeepa Roy)

Spring 2021  
Spring 2018

*Master's Committee Member*

1. Tiangang Chen (advisor: Jun Yang)
2. Yuxi Yang (advisor: Mary Cummings)

Spring 2020  
Fall 2019

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

1. Anwar Baroudi, "Do students like and remember hints?"
2. Maia Rosengarten, "Do students like and remember hints?"
3. Kavi Gupta, "Delivering Hints to Students Based on Wrong Answers"
4. Nikunj Jain
  - "Quantitative Analysis of Code-Tracing Wrong Answers"
  - "Delivering Hints to Students Based on Wrong Answers"
5. Sreesha Venkat
  - "Qualitative Analysis of Code-Tracing Wrong Answers"
  - "Delivering Hints to Students Based on Wrong Answers"
6. Regina Ongowarsito
  - "Qualitative Analysis of Code-Tracing Wrong Answers"
  - "Delivering Hints to Students Based on Wrong Answers"
7. Krishna Parashar
  - "Qualitative Analysis of Code-Tracing Wrong Answers"
  - "Delivering Hints to Students Based on Wrong Answers"
8. Steven Chi, "Predicting Struggling Students from Student Answers"
9. Spenser Chiang, "OK.py Feature: Hints"
10. Hayden Sheung, "OK.py Feature: Hints"
11. Kelly Liu, "Qualitative Analysis of Code-Tracing Wrong Answers"
12. Hannah Huang, "Qualitative Analysis of Code-Tracing Wrong Answers"
13. Michelle Tian, "Qualitative Analysis of Code-Tracing Wrong Answers"

Spring 2018  
Spring 2018  
Spring 2018  
Fall 2016 - Summer 2017

Fall 2016, Spring 2017

Summer 2016 - Spring 2017

Summer 2016 - Spring 2017

Spring 2016, Summer 2016  
Spring 2016  
Spring 2016  
Spring 2016  
Fall 2015, Spring 2016  
Fall 2015

**ACADEMIC SERVICE****Duke University**

- Computer Science Advisor
  - 2025-2026 year: 35 students
  - 2024-2025 year: 36 students
  - 2023-2024 year: 32 students
  - 2022-2023 year: 19 students
  - 2021-2022 year: 20? students
  - 2020-2021 year: 38 students
  - 2019-2020 year: 31 students
  - 2018-2019 year: 27 students
- College Advisor
  - 2025-2026 year: 2 students
  - 2024-2025 year: 6 students
  - 2023-2024 year: 6 students
  - 2022-2023 year: 6 students
  - 2021-2022 year: 7 students
  - 2020-2021 year: 7 students
  - 2019-2020 year: 6 students
  - 2018-2019 year: 3 students
- The AI at Duke Pillar Advisory Committee - Life with AI
- Duke Century Courses Committee
- Computer Science Dept. Undergraduate Affairs Committee

Aug 2018 - Now

Aug 2018 - Now

Aug 2025 - Now  
Dec 2024 - Now  
Aug 2022 - Now

• Computer Science Dept. Teaching Excellence Committee	Aug 2024 - Now
• Duke SPIRE Mentor	Aug 2023 - Now
• Computer Science Dept. Chair of Undergraduate Affairs Committee	Aug 2024 - May 2025
• Computer Science Dept. Assessment Liaison	Aug 2023 - Dec 2024
• Computer Science Dept. Faculty Search Committee Lecturer	Aug 2022 - Dec 2022
• Computer Science Dept. DUS Assistant Hiring Committee	Jan 2022 - May 2022
• Computer Science Dept. Undergraduate Coordinator Hiring Committee	Jan 2022 - May 2022
• Computer Science Dept. Space Committee	July 2020 - May 2021
• Computer Science Dept. Faculty Search Committee PoP	Aug 2019 - May 2020
• Computer Science Dept. Communications Committee	Dec 2018 - May 2020

**Conference**

SIGCSE Technical Symposium Hybrid Experience Chair	2022, 2023, 2024*
• 2024* - Advisory role	
• 2023 - Attendees: 200 online, 1,354 in-person, 1,554 total	
• 2022 - Attendees: 632 online, 788 in-person, 1,544 total	
SIGCSE Technical Symposium Reviewer	2019, 2020, 2021, 2022, 2024, 2025
• 2025 - Outstanding reviewer	
ICER Code of Conduct/Ethics Facilitator	2021, 2022
ICER Reviewer	2021, 2024
Learning@Scale Reviewer	2017, 2020

**Grant Proposal Reviewer**

National Science Foundation Panelist for CISE	2018, 2021, 2025
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**External**

Moderator and Online Social Gathering Coordinator for cs-teaching Slack	April 2021 - Jan 2026
CRA-WP Table Mentor for Teaching Track Faculty Workshop	March 2021

**University of California, Berkeley**

• EECS Peers	Aug 2015 - May 2017
– Member	Aug 2013 - May 2015
– CS-Coordinator and Founder	
• 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)	Aug 2008 - May 2009
– Co-Chair	Aug 2007 - May 2008
– Treasurer	
• CS Ambassador	Aug 2008 - May 2009
• PRIME Scholar	Aug 2006 - Dec 2007

**TALKS**

- Teaching in Age of AI working group, Guest Speaker, Duke University, Jan 16, 2026.
- Bass Seminar “AI Invades the Classroom: What’s an Instructor to Do?”, Duke University, Nov 7, 2025.
- The Art & Science of Teaching Series: Designing for Deep Learning, Duke University, Oct 7, 2025.
- Jupyter Notebooks at NCShare, Online, Nov 14, 2023.

- Presented 2 peer instructions at “Spiffy Peer Instruction Questions.” SIGCSE TS, Toronto, Canada, March 17, 2023.
- Jupyter Notebooks at NCShare, Online, Feb 21, 2023.
- “How I got to where I am today,” guest speaker for Women in Tech seminar at Georgia Tech’s OMSCS program, Online, Sep 19, 2022.
- “Women in Tech,” guest speaker for Duke Association for Business Oriented Women (BOW), Online, Sep 9, 2022.
- “Using Data Science in CS Education & What is a Teaching Professor?,” University of Illinois Computer Science, Online, March 29, 2022.
- “Teaching Data Science in a Flipped Classroom by Using Data Science,” Berkeley EECS, Online, Mar 9, 2022.
- “A Scaled Class is a Rich Class: How to approach large class data sets to drive class improvements,” CS Colloquium Series, Northwestern McCormick School of Engineering, Online, May 26, 2021.
- “A Study of the Relationship Between a CS1 Student’s Gender and Performance Versus Gauging Understanding and Study Tactics,” ACM Technical Symposium on Computer Science Education (SIGCSE), Online, Mar 18, 2021.
- “Learning at Scale with Kristin Stephens-Martinez,” #CSK8 Podcast with Jared O’Leary, Internet, Sept 28, 2020, <https://jaredoleary.com/csk8feed/51>
- “How to Create and Use Formative Assessments at Scale,” Codio Webinar, Internet, Jul 14, 2020. <https://www.codio.com/webinar-how-to-create-and-use-formative-assessments-at-scale>
- “Insights from Having Students Predict their Exam Grades,” Behavioral Research Informing Teaching Excellence (BRITE), Duke University, Durham, NC, Mar 4, 2020.
- “It’s a Marathon, Not a Sprint: Balancing Work and Life in Grad School and Beyond,” with James Mickens by CRA-WP, Grace Hopper Celebration, Orlando, FL, Oct 2, 2019.
- “Giving Hints is Complicated: Understanding the Challenges of an Automated Hint System Based on Frequent Wrong Answers,” Project Search Pre-Orientation undergraduate program, Duke University, Durham, NC, Aug 7, 2019.
- “How Can Data from Large Classrooms Improve Learning?,” Behavioral Research Informing Teaching Excellence (BRITE), 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 undergraduate program, Duke University, Durham, NC, Aug 13, 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 (ITiCSE), Larnaca, Cyprus, Jul 2, 2018.
- “Taking Advantage of Scale by Analyzing Frequent Constructed-Response, Code Tracing Wrong Answers,” ACM International Computing Education Research (ICER), Tacoma, WA, USA, Aug 18, 2017.
- “Monitoring MOOCs: Which information sources do instructors value?” ACM Learning At Scale (L@S), Atlanta, GA, USA, Mar 4, 2014.

**PANELS**

- “Who’s Cheating Whom? Changing the Narrative Around Academic Misconduct.” (Moderator) SIGCSE TS, Toronto, Canada, March, 17, 2023.
- “It Seemed Like a Good Idea at the Time (“Let Me Help You with That” edition).” SIGCSE TS, Toronto, Canada, March, 16, 2023.
- “Technology We Can’t Live Without! (COVID-19 edition).” SIGCSE TS, Providence, RI, March 4, 2022.
- “Where Should We Go From Here? Eliminating Inequities In CS Education, Featuring Guests From The CS-Ed Podcast.” (Moderator) SIGCSE TS, Online, March 16, 2021.
- “CS Instruction Post-Quarantine,” Emerging Trends in Computer Science, Online, June 28, 2021.
- “David M. Rubenstein Scholars Spotlight Series,” Duke University, July 3, 2019.

**ADDITIONAL BROADENING PARTICIPATION IN COMPUTING**

- Faculty Lunches (flunch) with students
  - 2025: 11
  - 2024: 1
  - 2023: 3
  - 2022: 4
  - 2021: 1 (Covid-19)
  - 2020: 4 (Covid-19, parental leave)
  - 2019: 7
  - 2018: 8
- The CS-Ed Podcast inspired the podcast *The Rest is Teaching: A Podcast for Computing Education Practitioners & Researchers.* 2025
- Events Attended
  - Grace Hopper 2009, 2012, 2018, 2019, 2020, 2021
  - Duke CS Discussion Panel on “Picture a Scientist” Movie November 2020
  - Tapia 2014
- Mentor female Ph.D. student from University of Florida 2020-2021
- Undergraduate Teaching Assistant (UTA) Diversity Initiative Fall 2020
- Coordinated Computer Science Education Research Reading Group Summer 2020

**MEMBERSHIPS**

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