

# VARSHA KOUSHIK

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## EDUCATION

2017 – 2022	<b>Ph.D. in Computer Science</b> University of Colorado Boulder, Boulder, CO, USA <i>Advisor: Shaun K. Kane</i>
2015 - 2017	<b>M.S. in Computer Science</b> University of Colorado Boulder, Boulder, CO, USA
2011 - 2015	<b>B.E. in Information Science</b> M S Ramaiah Institute of Technology, Bangalore, India

## EXPERIENCE

2022- present	<b>Colorado College</b> , Colorado Springs, CO <i>Assistant Professor</i>
2020	Accessibility Intern, Verizon Media <i>Manager: Larry Goldberg</i>
2018-2019	Coleman Fellow, Coleman Institute for Cognitive Disabilities
2017-2018	Graduate Research Assistant, University of Colorado Boulder

## AWARDS AND HONORS

2022	Commencement Student Speaker, Computer Science, University of Colorado Boulder
2022	3 <sup>rd</sup> Place, Colorado State 3MT Thesis Competition
2022	Winner, 3MT Thesis Competition, University of Colorado Boulder
2022	Laughing Goat Library Student Employee Scholarship
2021-2022	Lead Teaching Assistant, <i>Department of Computer Science, University of Colorado Boulder</i>
2021	Carol B. Lynch Fellowship, <i>University of Colorado Boulder</i> (Graduate Assistantship for Fall 2021)
2021	Ph.D. Summer Research Fellowship, <i>Department of Computer Science, University of Colorado Boulder</i>
2021	Provost Fellowship of the University Libraries, <i>University of Colorado Boulder</i>
2021	Hope Schultz Jozsa Award, <i>University of Colorado Boulder</i>
2019	ACM SIGCHI Best Paper Honorable Mention [5%]
2019	SIGCHI Executive Committee Travel Grant
2018-2019	Coleman Fellow, <i>Coleman Institute of Cognitive Disabilities</i>
2016, 2017, 2019	Dean' Matching Travel Funds + Department Travel Grants, <i>University of Colorado Boulder</i>

## GRANTS

2023	SEGway Seed Funding, Colorado College. Customizing Prompting Systems to Support Independence for People with Cognitive Disabilities. Varsha Koushik (PI). Total: \$4400
2023	Dean of the Faculty Curriculum Development Grant Award, Colorado College. Total: \$2000

## PUBLICATIONS

### Peer-reviewed Conference Journals

- [J1] **Varsha Koushik** and Shaun K. Kane. Towards AR Coaching for Daily Routines: Participatory Design with Individuals with Cognitive Disabilities and Their Caregivers, *International Journal of Human-Centered Studies*, 2022.

### Peer-reviewed Conference Papers

- [C1] **Varsha Koushik** and Shaun Kane. 2023. Ability + Motivation: Understanding Factors that Influence People with Cognitive Disabilities in Regularly Practicing Daily Activities. In *Proceedings of the 20th International Web for All Conference (W4A '23)*. Association for Computing Machinery, New York, NY, USA, 122–133. **Best Technical Paper Candidate**.
- [C2] Keke Wu, Michelle Ho Tran, Emma Petersen, **Varsha Koushik**, and Danielle Albers Szafir. 2023. Data, Data, Everywhere: Uncovering Everyday Data Experiences for People with Intellectual and Developmental Disabilities. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI '23)*. Association for Computing Machinery, New York, NY, USA, Article 804, 1–17.
- [C3] **Varsha Koushik**, Shaun K. Kane. “It Broadens My Mind”: Empowering People with Cognitive Disabilities through Computing Education. *Proceedings of the 2019 ACM Conference on Human Factors in Computing Systems (CHI)*. ACM, New York, NY, USA, 131-139. [23%]
- [C4] **Varsha Koushik**, Darren Guinness, Shaun K. Kane. StoryBlocks: A tangible programming game to create accessible audio stories *Proceedings of the 2019 ACM Conference on Human Factors in Computing Systems (CHI)*. ACM, New York, NY, USA, 131-139. [23%] **Best Paper Honorable Mention [5%]**.
- [C5] Shaun K. Kane, **Varsha Koushik**, Annika Muehlbradt. Bonk: accessible programming for accessible audio games. In *Proceedings of the 17th ACM Conference on Interaction Design and Children (IDC '18)*. ACM, New York, NY, USA, 132-142.

### Demos and Posters

- [D1] **Varsha Koushik**, Shaun K. Kane. 2017. Tangibles + Programming + Audio Stories = Fun. In *Proceedings of the 19th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '17)*. ACM, New York, NY, USA. Demo. [26%]
- [P1] Annika Muehlbradt, **Varsha Koushik**, Shaun K. Kane. Goby: A Wearable Swimming Aid for Blind Athletes. 2017. In *Proceedings of the 19th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '17)*. ACM, New York, NY, USA. Poster. [26%]

- [P2] **Varsha Koushik**, Alexandra Gendreau, Eugene Ho, Spencer Wilson, and Stephen Volda. 2017. Snappable sensors: empowering future scientists. In *Proceedings of the 2017 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2017 ACM International Symposium on Wearable Computers (UbiComp'17)*. ACM, New York, NY, USA, 117120. Poster.
- [P3] **Varsha Koushik**, Clayton Lewis. 2016. An Accessible Blocks Language: Work in Progress. In *Proceedings of the 18th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '16)*. ACM, New York, NY, USA. Poster. [26%]
- [P4] **Varsha Koushik**, Clayton Lewis. 2016. Work in progress: A non-visual interface for a blocks language. Proceedings PPIG 2016 Psychology of Programming Annual Conference, Cambridge, UK, September 7–10.

### Dissertation

- [D] **Koushik, V. S.** 2022. Designing Customizable Smart Interfaces to Support People with Cognitive Disabilities in Daily Activities. *Doctoral dissertation, University of Colorado at Boulder*.

### Doctoral Consortium

- [DC1] **Varsha Koushik**. 2020. Making block-based programming accessible to people with cognitive disabilities. SIGACCESS Access. Comput., 126, Article 5 (January 2020), 1 pages.

### Book Chapters

- [B1] S. Bhaduri, A. Gendreau, **V. S. Koushik**, T. Sumner, J. Ristvey, and R. Russell. (2018). Promoting Middle School Students' Motivation and Persistence in an After-School Engineering Program (J. Barnes-Johnson and J. M. Johnson, Eds.). In *STEM21: Equity in teaching and learning to meet global challenges of standards, engagement, and transformation*.

## TEACHING EXPERIENCE

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### Colorado College (2022 - present)

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#### Assistant Professor

Fall 2023 Block 4	CP 274 Software Design
Fall 2023 Block 2	CP 341: Human-Centered Computing
Fall 2023 Block 1	CP 115 Computational Thinking
Spring 2023 Block 8	CP 341: Human-Centered Computing
Spring 2023 Block 6	CP 274 Software Design
Fall 2022 Block 4	CP 499 Team Software Project
Fall 2022 Block 3	CP 122 Computer Science 1
Fall 2022 Block 1	CP 274 Software Design

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### University of Colorado Boulder (2015 - 2022)

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#### Graduate Part-Time Instructor

Summer 2019	CSCI 1300: Fundamentals of Computing 1
Summer 2018	CSCI 3002: Foundations of Human-Centered Computing

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#### Teaching Assistant

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Spring 2020-2021	CSCI 3002: Foundations of Human-Centered Computing
Fall 2016-2019, Spring 2022	CSCI 1300: Fundamentals of Computing 1

### Guest Lectures

2021	Empowering People with Disabilities through Technology, <i>University of Denver</i>
2018	Accessibility is becoming mainstream, <i>Haverford College</i>
2018	CSCI 3002: Foundations of Human-Centered Computing, <i>Department of Computer Science, University of Colorado Boulder</i>
2017	CSCI 1300: Fundamentals to Computing 1, <i>Department of Computer Science, University of Colorado Boulder</i>

### INVITED TALKS

2021	Empowering People with Disabilities through Technology, <i>University of Denver</i>
2020	Embracing Accessibility Practices, <i>University of Colorado Boulder</i>
2019	Swimming into the Ocean, <i>Teen Science Café, University of Colorado Boulder</i>
2018	Accessible CS Education in the Smart Home, <i>Coleman Conference</i>
2017	Tangible + Programming = Audio Stories, <i>Accessible K-12 Symposium, SIGCSE</i>

### SERVICE

#### Conference Organization

2023	Program Committee Member, ACM ASSETS 2023
2023	Session Chair, <i>Usability and Research Methods</i> , ACM ASSETS 2023

#### Academic Reviewer

2018 – present	SIGCSE'18-present, CHI'19-present, DIS'20 – present, TACESS'21- present, IJHCS'21 – present, ASSETS'22-present
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#### University of Colorado Boulder

2021-2022	Lead TA, <i>Department of Computer Science, University of Colorado Boulder</i>
2021-2022	International Student Advisory Board, <i>Graduate School, University of Colorado Boulder</i>
2020-2021	Graduate Committee Student Representative, <i>Department of Computer Science, University of Colorado Boulder</i>
2018-2019	Discovery Learning Assistant Peer Mentor
Fall 2018	Graduate Student Mentor
Fall 2018	International Student Peer Mentor

#### Student Volunteer

2018-2019	SIGCHI Executive Committee
2016	ACM Conference on Human Factors in Computing (CHI)

## PRESS

2023	CC Course Emphasizes Human-Computer Interaction through Hands-on Learning, 2023, <i>CC Stories</i>
2022	How on Earth Radio Show, CU Boulder Graduates, 2022
2022	Presenting tomorrow's leaders: The class of 2022, <i>CU Boulder Today</i>
2021	"2021 Provost Fellow to present research findings", <i>CU Boulder Today</i>
2021	"Celebrating 2020-2021 Graduate School Award Recipients!" <i>CU Boulder Today</i>
2018	"CU Boulder's "Superhuman" Lab is making programming more accessible", <i>Science Buffs</i>
2017	"Inventions to look for at the ATLAS Expo May 3", <i>CU Boulder Today</i>

## MENTORING

Summer 2023	<i>Yael Homa, Vlad Palma, Eric Uerling, B.S., Colorado College</i>
Spring 2023	<i>Ellen Moore, B.S., Colorado College</i>
2021 – 2022	<i>Mary Yoder, B.S., University of Colorado Boulder</i>
2018-2022	<i>Vinitha Gadiraju, Ph.D., University of Colorado Boulder</i>
2018-2020	<i>Gabriella Johnson, M.S, University of Colorado Boulder</i>