

# VARSHA KOUSHIK

vkoushik@coloradocollege.edu | koushikvarsha.bitbucket.io

## 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 <i>Manager: Larry Goldberg</i>
2018-2019	Coleman Fellow, Coleman Institute of Cognitive Disabilities
2017-2018	Graduate Research Assistant

## AWARDS AND HONORS

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>

## TEACHING EXPERIENCE

Graduate Part-Time Instructor	
Summer 2019	CSCI 1300: Fundamentals to Computing 1
Summer 2018	CSCI 3002: Foundations of Human-Centered Computing
Teaching Assistant	
Spring 2020-2021	CSCI 3002: Foundations of Human-Centered Computing
Fall 2016-2019	CSCI 1300: Fundamentals to Computing
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>

## 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,

### Peer-reviewed Conference Papers

- [C1] **Varsha Koushik**, Shaun K. Kane. "It Broadens My Mind": Empowering People with through Computing Education. *Proceedings of the 2019 ACM Conference on Human Factors in Computing Systems (CHI)*. ACM, New York, NY, USA, 131-139. [23%]
- [C2] **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%]**.
- [C3] 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.

### 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*.

## 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

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

## Academic Reviewer

2019 – present	CHI'2- - present, SIGCSE 2018-present, DIS'20 – present, TACESS'21- present, IJHCS'21 – present
----------------	---

## Student Volunteer

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

## PRESS

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

2021 – 2022	Mary Yoder, Undergraduate Student, <i>University of Colorado Boulder</i>
2018-2020	Gabriella Johnson, M.S, <i>University of Colorado Boulder</i>