# VARSHA KOUSHIK

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# **EDUCATION**

Ph.D. in Computer Science
University of Colorado Boulder, Boulder, CO, USA
Advisor: Shaun K. Kane
M.S. in Computer Science
University of Colorado Boulder, Boulder, CO, USA
B.E. in Information Science
M S Ramaiah Institute of Technology, Bangalore, India

# **EXPERIENCE**

2022- present	Colorado College, Colorado Springs, CO		
	Assistant Professor		
2020	Accessibility Intern		
	Manager: Larry Goldberg		
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, Department of Computer Science, University of Colorado Boulder
2021	Carol B. Lynch Fellowship, <i>University of Colorado Boulder</i> (Graduate Assistantship for Fall 2021)
2021	Ph.D. Summer Research Fellowship, Department of Computer Science, University of Colorado Boulder
2021	Provost Fellowship of the University Libraries, University of Colorado Boulder
2021	Hope Schultz Jozsa Award, University of Colorado Boulder
2019	ACM SIGCHI Best Paper Honorable Mention [5%]
2019	SIGCHI Executive Committee Travel Grant
2018-2019	Coleman Fellow, Coleman Institute of Cognitive Disabilities
2016, 2017, 2019	Dean' Matching Travel Funds + Department Travel Grants, <i>University of Colorado Boulder</i>

#### TEACHING EXPERIENCE

Colorado College (2022 - present)			
Instructor			
Fall 2022 Block 1	CP 274 Software Design		
Fall 2022 Block 3	CP 122 Computer Science 1		
Fall 2022 Block 4	CP 499 Team Software Project		

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

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Graduate Part-Time Instructor			
Summer 2019	CSCI 1300: Fundaments to Computing 1		
Summer 2018	CSCI 3002: Foundations of Human-Centered Computing		
Teaching Assistan	t		
Spring 2020-2021	CSCI 3002: Foundations of Human-Centered Computing		
Fall 2016-2019	CSCI 1300: Fundaments to Computing		
Guest Lectures			
2021	Empowering People with Disabilities through Technology, University of Denver		
2018	Accessibility is becoming mainstream, Haverford College		
2018	CSCI 3002: Foundations of Human-Centered Computing, Department of Computer		
	Science, University of Colorado Boulder		
2017	CSCI 1300: Fundaments to Computing 1, Department of Computer Science, University of Colorado Boulder		

### **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 *Prosceedings 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 Voida. 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, University of Denver
2020	Embracing Accessibility Practices, University of Colorado Boulder
2019	Swimming into the Ocean, Teen Science Café, University of Colorado Boulder
2018	Accessible CS Education in the Smart Home, Coleman Conference
2017	Tangible + Programming = Audio Stories, Accessible K-12 Symposium, SIGCSE

## **SERVICE**

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2021 2022	International Student Advisory Doord Conducts Cabacil University of Calanda Bayldan			
2021-2022	International Student Advisory Board, Graduate School, University of Colorado Boulder			
2020-2021 Graduate Committee Student Representative, Department of Computer Science, Uni				
	Colorado Boulder			
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", CU Boulder Today			
2021	"Celebrating 2020-2021 Graduate School Award Recipients!" CU Boulder Today			
2018	"CU Boulder's "Superhuman" Lab is making programming more accessible",  Science Buffs			
2017				
MENTORING				
2021 – 2022	Mary Yoder, Undergraduate Student, University of Colorado Boulder			
2018-2020	Gabriella Johnson, M.S, <i>University of Colorado Boulder</i>			