

Rishi Vanukuru

ATLAS Institute
University of Colorado Boulder

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EDUCATION

- 2022– **University of Colorado Boulder**
Ph.D. in Creative Technology & Design
- 2018–20 **Indian Institute of Technology Bombay**
M.Des. in Interaction Design
- 2014–18 **Indian Institute of Technology Bombay**
B.Tech. in Civil Engineering
Minor in Design

RESEARCH EXPERIENCE

- SPRING 2022 – PRESENT **ATLAS Institute, University of Colorado Boulder**
Graduate Research Assistant
Advisor: Dr. Ellen Yi-Luen Do
Designing Cross-reality Ecosystems for Collaboration and Creativity
- SUMMER 2023 **Ericsson Research, Santa Clara**
Research Intern
Advisor: Dr. Greg Phillips
Systems for Network-adaptive Augmented Reality Remote Communication
- FALL 2020 – SPRING 2021 **IDC School of Design, IIT Bombay**
Research Associate
Advisor: Dr. Jayesh Pillai
Supporting Remote Learning with Mobile Augmented Reality
- SUMMER 2019 **Laval Institute, Arts et Métiers, France**
Research Intern
Advisor: Dr. Simon Richir
Studying Creativity and Design in Virtual Reality

PUBLICATIONS

Journal & Conference Articles

- 2023 **Rishi Vanukuru**, Suibi Che-Chuan Weng, Krithik Ranjan, Torin Hopkins, Amy Banic, Mark D. Gross, Ellen Yi-Luen Do. “DualStream: Spatially Sharing Selves and Surroundings using Mobile Devices and Augmented Reality” In: *IEEE International Symposium on Mixed and Augmented Reality, ISMAR 2023*. arXiv:2309.00842
- 2022 S. Sandra Bae, **Rishi Vanukuru**, Ruhan Yang, Peter Gyory, Ran Zhou, Ellen Yi-Luen Do, and Danielle Albers Szafr. “Cultivating Visualization Literacy for Children Through Curiosity and Play.” In: *IEEE Transactions on Visualization and Computer Graphics*, 2022. doi:10.1109/TVCG.2022.3209442
- 2022 Torin Hopkins, Suibi Che-Chuan Weng, **Rishi Vanukuru**, Emma Wenzel, Amy Banic, Mark D. Gross, and Ellen Yi-Luen Do. “AR Drum Circle: Real-Time Collaborative Drumming in AR.” In: *Frontiers in Virtual Reality*, 91. doi:10.3389/frvir.2022.847284

- 2022 Torin Hopkins, Suibi Che-Chuan Weng, **Rishi Vanukuru**, Emma Wenzel, Amy Banic, and Ellen Yi-Luen Do. “How Late is Too Late? Effects of Network Latency on Audio-Visual Perception During AR Remote Musical Collaboration.” In: *IEEE International Symposium on Mixed and Augmented Reality, ISMAR 2022*. doi:10.1109/VRW55335.2022.00194
- 2021 Sylvain Fleury, **Rishi Vanukuru**, Charles Mille, Killian Poinot, Aurélien Agnès, and Simon Richir. “CRUX: A Creativity and User Experience model.” In: *Digital Creativity*, 32:2 (pp. 116-123). doi:10.1080/14626268.2021.1915339
- 2020 Sylvain Fleury, Aurélien Agnès, **Rishi Vanukuru**, Emma Goumillout, Nicolas Delcombel, and Simon Richir. “Studying the Effects of Visual Movement on Creativity.” In: *Thinking Skills and Creativity*, 36, 100661. doi:10.1016/j.tsc.2020.100661

Posters & Demos

- 2020 **Rishi Vanukuru**, Amarnath Murugan, and Jayesh Pillai. “Dual Phone AR: Using a Second Phone as a Controller for Mobile Augmented Reality.” In: *Adjunct Publication of the 33rd Annual ACM Symposium on User Interface Software and Technology (UIST '20 Adjunct)*. doi:10.1145/3379350.3416139
- 2020 **Rishi Vanukuru**. “Accessible Spatial Audio Interfaces: A Pilot Study into Screen Readers with Concurrent Speech.” In: *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems (CHI EA '20)*. doi:10.1145/3334480.3381440

Workshop Papers

- 2023 **Rishi Vanukuru**, Ellen Yi-Luen Do. “Exploring the use of Mobile Devices as a Bridge for Cross-Reality Collaboration” In: *IEEE ISMAR 2023 Joint Workshop on Cross-Reality*. [paper]
- 2022 **Rishi Vanukuru**, Amarnath Murugan, Jayesh Pillai, and Ellen Yi-Luen Do. “Designing and Studying Social Interactions in Shared Virtual Spaces using Mobile Augmented Reality.” In: *ACM CHI 2022 Workshop on Social Presence in Virtual Event Spaces*. [paper]
- 2021 Amarnath Murugan, **Rishi Vanukuru**, and Jayesh Pillai. “Towards Avatars for Remote Communication using Mobile Augmented Reality.” In: *IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW)* (pp. 135-139). doi:10.1109/VRW52623.2021.00032

AWARDS

- 2022 Dr. Awtar and Teji Singh Graduate Fellowship (\$20,000)
- 2022 SIGCHI Gary Marsden Travel Award (\$1,200)
- 2020 Institute Silver Medal, IIT Bombay (1st rank in the M.Des program)
- 2020 1st Position, CHI Student Research Competition (Graduate category)

TEACHING & SERVICE

Co-Instructor	Introduction to Virtual Reality (2022)
Teaching Assistant	Design for Virtual Reality (2019-2021), Engineering Mechanics (2018)
Organizing Committee	Lead for Virtual Operations, IndiaHCI 2020
Reviewer	CHI 2023, INTERACT 2023, CHI 2021 Student Research Competition
Student Volunteer	UIST 2020, IndiaHCI 2019, TypoDay 2019
Student Mentor	Indian Institute of Technology Bombay, 2016–2018

Updated October 2023