# Swati Pandita

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## Research Interests

Human Computer Interaction: embodiment, mental health, identity, virtual reality (VR), & social media

# Education

2017–2022	Communication, PhD, Cornell University Committee: Drs. Andrea Stevenson Won (Chair), Lee Humphreys, Natalie Bazarova, Marlen Gonzalez, and JoAnn Difede Dissertation: "Affective Avatars: Effects of Avatar Customization on Positive and Negative Emotions"
2020	Communication, MS, Cornell University
2016	Information Science, MPS, Cornell University
2015	Neuroscience, BS, Rhodes College

# Research Experience

8/2022-present	<b>The Fear Lab,</b> California Institute of Technology, Pasadena, CA Postdoctoral Researcher
8/2017–8/2022	<b>The Virtual Embodiment Lab</b> , Cornell University, Ithaca, NY Graduate research assistant
1/2017–6/2017	<b>The Yau Lab</b> , Baylor College of Medicine, Houston, TX Research assistant
4/2016–1/2017	Pairade (now Current), Chicago, IL User experience research intern
5/2016–8/2016	<b>Psycomm Lab</b> , Cornell University, Ithaca, NY Graduate research assistant
2/2016–5/2016	<b>Communication &amp; Collaborative Technologies Lab</b> , Cornell University, Ithaca, NY Graduate research assistant

8/2015–1/2016 Visual Cognition Lab, Rhodes College, Memphis, TN
 Undergraduate research assistant
 5/2014–7/2014 Cognition and Aging Lab, Rhodes College, Memphis, TN
 Undergraduate research assistant
 9/2013–5/2014 Learning Technologies Lab, Rhodes College, Memphis, TN
 Undergraduate research assistant

### **Awards**

2021	CALS Alumni Association Award (\$400), Cornell University
2020	Media Studies Graduate Working Group Grant (\$1,000), Cornell University
2017	Cornell Graduate Research Fellowship (\$28,036), Cornell University
2014	Cognitive Aging Fellowship (\$4,329), Rhodes College

## **Publications**

- Kao, D., Mubarrat, S. T., Joshi, A., **Pandita, S.**, Mousas, C., Liang, H. N., & Ratan, R. (2023). Exploring how gender-anonymous voice avatars influence women's performance in online computing group work. *International Journal of Human-Computer Studies*, 103146. https://doi.org/10.1016/j.ijhcs.2023.103146
- Boydstun, C., **Pandita, S.**, Finkelstein-Fox, L., Difede, J. "Harnessing virtual reality for disaster mental health: a multidisciplinary systematic review." Translational Issues in Psychological Sciences. https://doi.org/10.1037/tps0000282
- Won, A. S., **Pandita, S.,** Kruzan, K. (2020). "Social interaction and pain threshold in virtual reality." Cyberpsychology, Behavior, and Social Networking, 23(12). https://doi.org/10.1089/cyber.2020.0055

Madden, J. H., **Pandita, S.**, Won, A.S., Schuldt, J.P., Kim, B., & Holmes, N.G. (2020). "Ready student one: Exploring the predictors of student learning in virtual reality." PLoS ONE, 15(3). https://doi.org/10.1371/journal.pone.0229788

**Pandita, S.**, & Won, A.S. (2020). "Clinical Applications of virtual reality in patient-centered care." In J. Kim & H. Song (1), Technology and Health: Promoting Attitude and Behavior Change (pp. 129–148). Academic Press.

## **Archived Papers**

Sun, Y., **Pandita, S.**, Madden, J. M., Kim, B., Holmes, N. G., Won, A. S. (2023). "Exploring interaction, movement, and video-game experience in an educational VR Experience." In *Extended Abstracts on Human Factors in Computing Systems (CHI)*.

Long, T., **Pandita, S.**, & Won, A. S. (2023). Perspectives from Naive Participants and Experienced Social Science Researchers on Addressing Embodiment in a Virtual Cyberball Task. In *Computer Supported Cooperative Work and Social Computing* (CSCW) (pp. 189-194).

**Pandita, S.**, Humphreys, L., Won, A.S. "The Paradox of Customization: Negotiating racial identity with "multiple choice" in avatar creation." PsyArXiv.

# Conference Papers & Presentations

- Won, A.S. & **Pandita, S.** (2022). "Being Yourself: A Scoping Review on How Avatar Personalization Is Implemented in Empirical Work." Poster to be presented at 72nd Annual International Association of Communication Conference, May 26-30, Hybrid Conference.
- Pandita, S., Humphreys, L., Won, A.S. (2021). "The paradox of customization: Negotiating racial identity with "multiple choice" in avatar creation." Paper presented at 71st Annual International Association of Communication Conference, May 27–31, Virtual Conference.
  - **Pandita, S.**, (2021). "Mechanisms of care: The importance of routine for mental healthcare in Animal Crossing New Horizons." Research escalator presented at 71st Annual International Association of Communication Conference, May 27-31, Virtual Conference.
- Pandita, S., Yee, J., & Won, A.S. (2020). "Affective embodiment: Embodying emotions through postural representation in VR." Poster presented at 27<sup>th</sup> IEEE Conference on Virtual Reality and 3D User Interfaces, March 22–26, Atlanta, GA.

**Pandita, S.** (2020). "Affective embodiment: The effect of avatar appearance and gesture representation on emotions in VR." Doctoral Consortium at 27<sup>th</sup> IEEE Conference on Virtual Reality and 3D User Interfaces, March 22–26, Atlanta, GA.

- Pandita, S., Humphreys, L., & Won, A.S. (2019). "Expectations of the self in virtual reality: A qualitative analysis of virtual avatar creation." Paper presented at 24<sup>th</sup> Annual CyberPsychology, CyberTherapy, and Social Networking Conference, June 24–26, Norfolk, VA.
  - **Pandita, S.**, Celikors, E., Rojas, N., et al. (2019). "Visualizing Movement with Learning Outcomes in Educational VR Environments." Poster presented at 24<sup>th</sup> Annual CyberPsychology, CyberTherapy, and Social Networking Conference, June 24–26, Norfolk, VA.
  - Won, A.S., Kruzan, K.\*, & **Pandita, S**.\* (2019). "As long as you're with me: the effects of social presence and distance on pain perception in virtual environments." Paper presented at 24<sup>th</sup> Annual CyberPsychology, CyberTherapy, and Social Networking Conference, June 24–26, Norfolk, VA.
- 2018 Madden, J. H., Won, A. S., Schuldt, J. P., Kim, B., **Pandita, S.**, Sun, Y., et. al. (2018). "Virtual Reality as a Teaching Tool for Moon Phases and Beyond." In Proceedings of the Physics Education Research Conference, Aug 1–2, Washington, DC.
  - Sun, Y., **Pandita, S.**, Shaikh, O., Kim, B. & Won, A. S. (2018). "Personalized Avatars and Self-presence." In Proceedings of the International Society for Presence Research Annual Conference, May 21–22, Prague, Czech Republic.
- Schrader, D., Tallapragada M., **Pandita S.**, Etri C., & Shore A. (2017). "Self Efficacy and Social Aggression." Paper presented at 43<sup>rd</sup> Association for Moral Education Annual Conference, St. Louis, MO.
  - Schrader, D., Tallapragada M., **Pandita S.**, Etri C., & Shore A. (2017). "Personality, Trust, and the Privacy Creep." Paper presented at 43<sup>rd</sup> Association for Moral Education Annual Conference, St. Louis, MO.
- 2016 **Pandita, S.**, Suresh, S., & Haberman, J. (2016). "Average Size Estimation of Dots Completing behind an Illusory Surface Is Precise." Poster presented at 16<sup>th</sup> Annual Meeting of Vision Sciences Society.
- Person, S., **Pandita S.\***, & Schonhoff A.\* (2014). "Politeness Strategies in Expert Tutoring." Poster presented at 24<sup>th</sup> Annual Meeting of Society for Text & Discourse, Chicago, IL.

<sup>\*</sup> indicates equal contribution

# Manuscripts Under Review

2023 **Pandita, S.**, Difede, J., Won, A. S. "Breathing Room: designing mood regulation spaces for depression."

**Pandita, S.\***, Garg, K.\*, Zhang, J., Zhang, J., Mobbs, D. "Virtual disembodiment and online social interaction: A boundary model."

Ratan, R., Lim, C, **Pandita, S.**, Foxman, M., Hales G. E., Liu, H., Lei, Y. S., Beyea, D., Lee O. JY. "Openness to the Metaverse Workplace: Zoom fatigue and metaverse information seeking mediate gender inequities."

# Manuscripts In Preparation

2023 **Pandita S.**, Won, A. S., "Effects of avatar customization on AAPIs coping with negative emotions."

Ratan, R. & **Pandita, S.** "Avatars, Explicated: Toward a broad definition to last another 4,000 words."

<sup>\*</sup> indicates equal contribution

# Cornell University Teaching Experience

#### Instructor of Record

Summer 2022 COMM 2010 Oral Communication

Spring 2020 COMM 2010 Oral Communication

Fall 2019 COMM 2010 Oral Communication

Summer 2019 COMM/INFO 2450 Communication and Technology

### **Graduate Teaching Assistant**

Spring 2022 COMM 3200 New Media & Society

Fall 2021 COMM 1101 Introduction to Communication

Summer 2021 COMM 4300 Ethics in New Media, Technology, and Communication

Fall 2017 COMM/INFO 2450 Communication and Technology

#### **Guest Lecturer**

Spring 2022 COMM 3200 New Media & Society

Fall 2021 COMM 1101 Introduction to Communication

Summer 2021 COMM 1300 Visual Communication

Spring 2019 COMM 1300 Visual Communication

Spring 2018 COMM 1300 Visual Communication

# Invited Talks, Workshops, & Panels

2021	Invited talk, "iLRN 2021 UX Insights." <u>Immersive Learning Research Network (iLRN)</u> . Online.
2021	Invited participant, "Research Collaboration Opportunity Jam." XR Access Symposium. Online.
2020	Invited talk, "Affective Embodiment: designing virtual environments for depression management." Visual Cognition Lab, Rhodes College.
2019	Organized Workshop, "Hands-on Workshop in Immersive Technology for

Beginners." Immersive Media in Medicine Symposium. New York, NY.

Panel Moderator, "VR for Beginners." Immersive Media in Medicine Symposium. New York, NY.

Panelist, "Practical Replication and Data Sharing Examples." 69<sup>th</sup> International Communication Association of Communication Conference. Washington, D.C.

# Service

Volunteer		
	2021	iLRN Assessment and Evaluation Team
	2018	Connecting Opportunities Summer Event, organized by Lesa Carter and Kathy Dimiduk of Engineering, Cornell University.
Review		
	2023	Designing Interactive Systems International Communication Association (ICA)
	2022	Computer-supported Cooperative Work (CSCW)
	2020	Cyberpsychology, Behavior, and Social Networking
	2022	New Media & Society

# Students Mentored

#### Current

#### Caltech

2023 Julia Kim, Computer Science (BS)

## Cornell University

2021 Tao Long, Information Science (IS), now PhD student at Columbia University

Jueun Kwon, high school mentee now at Cornell University

#### **Former**

### Cornell University

2021-2022	Stephanie Tan, Communication (BS)
2021	Winnie Chen, Communication (BS)
2020-2022	Cathy Xie, Communication (BS)
2020	Christabella Forest, Communication (BS)
2019-2020	Nayana Paraviel, Computer Science (BS) Annie Fu, Information Science (BS) Michael Huang, Information Science (BS)
2017-2020	Jessica Yee, Information Science (BS) Joshua Zhu, Information Science (BS)
2018	Grayson Rosenberg, high school mentee now at Cornell University
2017-2018	Jane Kim, Computer Science (BS) Frank Rodriguez, Computer Science (BS) Anirudh Maddula, Computer Science (BS)
Rhodes College	
2014-2016	Ashley Bruneau, Biology (BS)

# Association Membership

2019–present International Communication Association (ICA)

2019-2020 IEEE

2015–2016 Vision Sciences Society (VSS)

# Media Coverage

2019 <u>Episode 65: Jack Madden and Swati Pandita</u>. Leading Lines Podcast. Oct 7.

Study Finds No Difference in VR Learning Outcomes Compared to Other

Modes. Campus Technology. Feb 7.

Study probes effect of virtual reality on learning. Cornell Chronicle. Feb 5.

### Skills

Psychophysics MatLab, Psych Toolbox, AFNI, FreeSurfer

Qualitative Interview study design, semi-structured interviews, and thematic analysis

Quantitative Experimental design, survey design, statistics (SPSS, R)

VR movement data collection and analysis

User-centered Development: Unity Engine (C#), WebGL, FTP

Design Prototyping: Adobe Photoshop, Figma, Sketch, Invision, CSS, HTML

Methods: Participatory design, Personas, User Modeling, Storyboarding,

User-testing