

# Portia Wang

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[Personal Website](#)

## Education

- 09/2024 – Present     **Stanford University**  
                         **Ph.D.** in Communication (Media Psychology)  
                         *Advisor:* Jeremy Bailenson
- 09/2022 – 04/2024     **Stanford University**  
                         **M.S.** in Management Science and Engineering (Computational Social Science)
- 09/2018 – 05/2022     **Columbia University**  
                         **B.S.** in Computer Science, Minor in Applied Mathematics  
                         *Advisor:* Steven Feiner

## Research Interests

Personalized Technology; Social Interaction; Design and Creative Process; Immersive Storytelling; Virtual Reality; Augmented Reality

## Peer-Reviewed Publications

\* denotes equal contributions

10. Santoso, M., **Wang, P.**, Han, E., & Bailenson, J. N. (2025). Virtual Reality Reduces Climate Indifference by Making Distant Locations Feel Psychologically Close. *Nature Scientific Reports*.
9. Bailenson, J. N., DeVaux, C., Han, E., Markowitz, D., Santoso, M., & **Wang, P.** (2025). Five Canonical Findings from 30 years of Psychological Experimentation in Virtual Reality. *Nature Human Behavior*.
8. Santoso, M., **Wang, P.**, Han, E., & Bailenson, J. N. (2025). Conversational Dynamics in Social Virtual Reality: A Large-Scale, Longitudinal Study of Speech Acts, Spatial Context, and Nonverbal Behavior. *Computers in Human Behavior*.
7. **Wang, P.**, Han, E., Queiroz, A. C., DeVaux, C., & Bailenson, J. N. (2025). Predicting and Understanding Turn-Taking Behavior in Open-Ended Group Activities in Virtual Reality. *Proceedings of the ACM on Human-Computer Interaction, (CSCW)*.
6. Han, E., **Wang, P.**, DeVaux, C., Harari, G., & Bailenson, J. N. (2024). Understanding the Role of Virtual Mobility on How and What People Create in Virtual Reality. *Thinking Skills and Creativity*.
5. **Wang, P.**, Miller, M. R., Queiroz, A. C., & Bailenson, J. N. (2024). Socially Late, Virtually Present: The Effects of Transforming Asynchronous Social Interactions in Virtual Reality. *In Proceedings of the CHI Conference on Human Factors in Computing Systems* (pp. 1-19).
4. Bailenson, J. N., Beams, B., Brown, J., DeVaux, C., Han, E., Queiroz, A. C. M., Ratan, R., Santoso, M., Srirangarajan, T., Tao, Y., & **Wang, P.** (2024). Seeing the World Through Digital Prisms: Psychological Implications of Passthrough Video Usage in Mixed Reality. *Technology, Mind, and Behavior*, 5(2: Summer 2024).

3. **Wang, P.**, Miller, M. R., Han, E., DeVeaux, C., & Bailenson, J. N. (2024). Understanding virtual design behaviors: A large-scale analysis of the design process in Virtual Reality. *Design Studies*, 90, 101237.
2. Aoyama, S.\*, Liu, J. S.\*, **Wang, P.**, Jain, S., Wang, X., Xu, J., ... & Feiner, S. (2024). Asynchronously Assigning, Monitoring, and Managing Assembly Goals in Virtual Reality for High-Level Robot Teleoperation. In *2024 IEEE Conference Virtual Reality and 3D User Interfaces (VR)* (pp. 450-460). IEEE.
1. Liu, J. S.\*, **Wang, P.\***, Tversky, B., & Feiner, S. (2022). Adaptive visual cues for guiding a bimanual unordered task in virtual reality. In *2022 IEEE International Symposium on Mixed and Augmented Reality (ISMAR)* (pp. 431-440). IEEE.

## Book Chapters

3. **Wang, P.**, Srirangarajan, T., & Bailenson, J. N. (To appear). Social Processes of Learning in Virtual Reality. In Plass, J., Mayer, R. & Makransky, G. (Eds.), *The Handbook of Learning in Virtual Reality*. MIT Press.
2. Srirangarajan, T., **Wang, P.**, & Bailenson, J. N. (To appear). Multimodal Analytics in Virtual Reality. In Plass, J., Mayer, R. & Makransky, G. (Eds.), *The Handbook of Learning in Virtual Reality*. MIT Press.
1. **Wang, P.**, & Bailenson, J. N. (To appear). Virtual reality as a research tool. In Reimer, T., van Swol, L. & Florack, A. (Eds.), *The Routledge Handbook of Communication and Social Cognition*. Routledge/Taylor and Francis.

## Extended Abstracts and Posters

2. **Wang, P.**, Miller, M. R., & Bailenson, J. N. (2023). The Belated Guest: Exploring the Design Space for Transforming Asynchronous Social Interactions in Virtual Reality. In *2023 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW)* (pp. 617-618). IEEE.
1. **Wang, P.**, Jain, S., Li, M., Aoyama, S., Wang, X., Song, S., ... & Feiner, S. (2023). Built to Order: A Virtual Reality Interface for Assigning High-Level Assembly Goals to Remote Robots. In *Proceedings of the 2023 ACM Symposium on Spatial User Interaction* (pp. 1-2).

## Works Under Review

6. Han, E., **Wang, P.**, Santoso, M., & Bailenson, J. N. (Under review). Mediated Mobility: The Effects of Embodied Travel in Virtual Reality
5. Bailenson, J., You, J., Markowitz, D., Petersen, G., Ratan, R., Santoso, M., & **Wang, P.** (Under review). VHIL-E: An Expert LLM of the Virtual Human Interaction Lab's Research and Teaching
4. **Wang, P.**, Santoso, M., Han, E., Srirangarajan, T., & Bailenson, J. N. (Under review). Virtual Place-making: Self-built environments and revisiting shared memories in virtual reality increase group cohesion.
3. **Wang, P.**, Santoso, M., Han, E., & Bailenson, J. N. (Under review). Joint action in virtual reality: Understanding the predictors and psychological outcomes of coordinated behaviors in immersive environments.
2. Han, E., **Wang, P.**, Santoso, M., Rastogi, K. & Bailenson, J. N. (Under review). Not Seeing Eye to Eye: The Effects of Perceptual Conflicts During Social Interactions in Mixed Reality.

1. Santoso, M., **Wang, P.**, Han, E., & Bailenson, J. N. (Under review). Attitudinal, Social, and Behavioral Outcomes in Group Collaboration with Passthrough Mixed Reality.

## Research Experience

- 10/2022 – Present **Virtual Human Interaction Lab**  
Advised by Professor Jeremy Bailenson (Stanford University)  
Conducts research on social behavior, presence, and emotion in virtual environments. Designs and evaluates proxemics, gaze, and mobility transformations to enhance immersive social interactions. Leads studies on modeling collaborative design, turn taking, and joint action in VR. Supports teaching in Virtual People and research mentorship.
- 07/2023 – 09/2023 **Sensing, Interaction & Perception Lab**  
Advised by Professor Christian Holz (ETH Zürich)  
One of 20 summer research fellows selected among 2,500+ applicants to conduct summer-long research in the Computer Science department at ETH Zürich. Conducted research on generating camera trajectories for VR and AR narratives.
- 09/2021 – 01/2023 **Computer Graphics and User Interfaces Lab**  
Advised by Professor Steven Feiner (Columbia University)  
Conceptualized, built, and tested adaptive visual guidance systems in Virtual Reality. Built remote robot control systems in Virtual Reality for human-robot collaboration.

## Awards and Honors

- 2024 **Stanford Graduate Fellowship in Science and Engineering**
- 2024 **Stanford McCoy Ethics Fellowship**
- 2023 **Stanford Sozo Graduate Fellowship**
- 2023 **Student Summer Research Fellowship, ETH Zürich**
- 2021 **Tau Beta Pi, Columbia University Chapter**

## Teaching Experience

- Fall 2025 **Teaching Assistant, Virtual People**  
Instructor: Professor Jeremy Bailenson (Stanford University)
- Fall 2024 **Teaching Assistant, Virtual People**  
Instructor: Professor Jeremy Bailenson (Stanford University)
- Spring 2022 **Head Teaching Assistant, 3D User Interface and Augmented Reality**  
Instructor: Professor Steven Feiner (Columbia University)
- Fall 2021 **Teaching Assistant, User Interface Design**  
Instructor: Professor Brian Smith (Columbia University)

## Talks and Presentations

- Summer 2025 **Guest Lecture, Virtual Reality and Human Behavior (Stanford University)**  
Immersive Storytelling

Fall 2024      **Guest Lecture, Virtual People (Stanford University)**  
Generative AI and Virtual Reality

### Professional Services

Conference      **ACM CHI (2025)**  
Reviewer      **ACM CHI Late-Breaking Work (2023, 2024, 2025)**  
                 **ACM CSCW (2024)**  
                 **ACM DIS (2024)**  
                 **ACM VRST(2025)**  
                 **IEEE ISMAR (2025)**

Journal      **International Journal of Human-Computer Studies**  
Reviewer      **Multimedia Tools and Applications**  
                 **Presence**

Other Services      **Columbia Application Development Initiative (ADI) Mentor (2021, 2022)**

### Industry Experience

Summer 2021      **Tencent (Product Management and Strategy Analyst Intern)** – Shenzhen, China  
Composed strategy proposals for the smart city agenda based on AI Lab’s 3D digital content capabilities; Delivered key strategy and roll-out plans for 3D digital content under the AI Lab; Defined objectives for the digital human enterprise solution.

Spring 2021      **Boston Consulting Group (Part-time Assistant)** – Remote  
Engaged in a digital transformation case and an international digital strategy case in the TMT sector, conducted digital strategy research and expert calls and created digital strategy database construction and drafting of project case deliverables.

Summer 2019      **MoreVFX (Concept Design Intern)** – Beijing, China  
Delivered and created early-stage virtual environments and concept arts for a science fiction movie production and facilitated the conceptualization and creation of commercial advertisements.

### Technical skills

#### **Programming**

Python, C#, R, Java, C++, C, Html, CSS

#### **Hardware**

HP Reverb G2 Omnicept, Meta Quest Series, Varjo XR-3, Microsoft Hololens Series, Pico

#### **Software**

Unity, 3DsMax, Photoshop, Figma, Mendeley, Git

#### **Languages**

English (fluent), Chinese (native)