

# Portia Wang

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[Personal Website](#)

## Education

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

## Research Interests

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

## Peer-Reviewed Papers

\* denotes equal contributions

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)*, to appear.
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., Santos, 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). <https://doi.org/10.1037/tmb0000129>
3. **Wang, P.**, Miller, M. R., Han, E., DeVaux, 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

5. Srirangarajan, T., Karmarkar, U., **Wang, P.**, & Bailenson, J. N. (Under review). The effects of interactivity and decision framing on product valuation in immersive virtual reality.
4. Santoso, M., **Wang, P.**, Han, E., & Bailenson, J. N. (Under review). How Virtual Reality Experiences of Distant Climate Events Enhances Place Attachment and Reduces Climate Indifference.
3. **Wang, P.**, Santoso, M., Han, E., & Bailenson, J. N. (Under review). Virtual Déjà Vu: The effects of reliving real-world episodic memories through self-built environments in virtual reality.
2. Santoso, M., **Wang, P.**, Han, E., & Bailenson, J. N. (Under review). Group Communication in Mixed Reality: The Impact of Video Passthrough on Social Affect and Cognitive Load Across Task Types in Classrooms.
1. Santoso, M., **Wang, P.**, Han, E., & Bailenson, J. N. (Under review). Conversational Dynamics in Social Virtual Reality: A Large-Scale, Longitudinal Study of Speech Acts, Spatial Context, and Nonverbal Behavior.

## Research Experience

- 10/2022 – **Virtual Human Interaction Lab**  
Present  
Advised by Professor Jeremy Bailenson (Stanford University)  
Created and evaluated proxemics and gaze transformations that facilitate asynchronous social interactions in VR; studied differences and extrapolated design behaviors across design prompts, contexts, and individuals in immersive design activities.
- 07/2023 – **Sensing, Interaction & Perception Lab**  
09/2023  
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 – **Computer Graphics and User Interfaces Lab**  
01/2023  
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 McCoy Ethics Fellowship**
- 2024 **Stanford Graduate Fellowship in Science and Engineering**
- 2023 **Stanford Sozo Graduate Fellowship**
- 2023 **Student Summer Research Fellowship, ETH Zürich**
- 2021 **Tau Beta Pi, Columbia University Chapter**

## Teaching Experience

- 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)

## Professional Services

- Conference Reviewer **ACM CHI (2025)**  
**ACM CHI Late-Breaking Work (2023, 2024, 2025)**  
**ACM CSCW (2024)**  
**ACM DIS (2024)**
- Journal Reviewer **International Journal of Human-Computer Studies**  
**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**

Meta Quest Series, Varjo XR-3, Microsoft Hololens 2, Pico

### **Software**

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

### **Languages**

English (fluent), Chinese (native)