# 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

- 9. Bailenson, J. N., DeVeaux, 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.
- 7. **Wang, P.**, Han, E., Queiroz, A. C., DeVeaux, 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.**, DeVeaux, 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., DeVeaux, 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).

<sup>\*</sup> denotes equal contributions

- 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

- 3. 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.
- 2. **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.
- 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 -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 Teaching Assistant, Virtual People** Fall 2024 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 **IEEE ISMAR (2025)** Reviewer **ACM CHI (2025) ACM CHI Late-Breaking Work (2023, 2024, 2025) ACM CSCW (2024) ACM DIS (2024) Journal International Journal of Human-Computer Studies** Reviewer Presence

Columbia Application Development Initiative (ADI) Mentor (2021, 2022)

Other Services

# **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)