Pin Yang
Ph.D. Candidate, Department of Psychological and Brain Sciences
Indiana University Bloomington
Bloomington, IN, USA
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EDUCATION

Ph.D. in Psychological and Brain Sciences & Cognitive Science
Indiana University Bloomington, Bloomington, IN
2021 - present
Defense date: May 22, 2026

- Advisor: Dr. Geoffrey Bingham
- Dissertation: **From Seeing in Depth to Acting in Depth: Individual Differences in Stereomotion Channels Reveal Their Functional Roles and Shape Visuomotor Reaching Dynamics**

B.S. in Psychology & Cognitive Science
East China Normal University, Shanghai, China.
2016 – 2020

RESEARCH INTERESTS

- 3D motion perception (stereomotion), depth cue integration
- Visually guided action and visuomotor control
- Continuous psychophysics, computational modeling, and ecological vision theory
- Vision neuroscience and visual deficits

RESEARCH EXPERIENCE

Research Assistant
Visuomotor Control lab, East China Normal University
2017 –2021

Research Assistant
Perception and Action Lab, Indiana University Bloomington
2021 – Present

- Designed and conducted experiments.
- Developed MATLAB, Python and Unity-based simulations for 3D stimuli.

- Analyzed data using Bayesian models, Kalman filters, τ-models, and cue reliability frameworks.

TEACHING EXPERIENCE

Teaching Assistant
2021 – Present

- Developed course materials, delivered lectures, and led discussion sections for undergraduate courses, including the courses of *Perception & Action* and *History and Systems of Psychology.*
- Provided instructional support through grading, exam preparation, and assignment feedback.
- Held weekly office hours to offer individualized academic support

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CONFERENCE PRESENTATIONS

- **Yang, P.,** & Bingham, G. (2026). Individual Differences in Stereomotion Yield Functional Differences in Reaching Dynamics. *International Conference on Perception and Action*
- **Yang, P.,** & Bingham, G. (2026). From Perception to Action: Stereomotion Channels Predict Reaching Dynamics. Vision Sciences Society Annual Meeting
- **Yang, P.,** & Bingham, G. (2025). Exploring Individual Variability in Stereomotion-Based Perception of Relative Distance. Psychonomics Annual Meeting
- **Yang, P.,** & Bingham, G. (2024). Investigating What Optical Texture Property is Used for Relative Distance Perception. Vision Sciences Society Annual Meeting
- **Yang, P.** et al. (2019). Effects of Stereo-blindness on Reaching-to-Grasp Dynamics. *OPAM annual meeting* (*Psychonomic Society-affiliated*)
- **Yang, P.** et al. (2019). How does Stereo-blindness Modulate Reaching-to-Grasp. Vision *Sciences Society Annual Meeting*.

PUBLICATIONS & PREPRINTS

- **Yang, P.** & Bingham, G. P., (in preparation). Individual Differences in Stereomotion Yield Functional Differences in Reaching Dynamics, Preprint: https://osf.io/5y3tn/files/osfstorage
- **Yang, P.** & Bingham, G. P., (under review). Functional Organization of Stereomotion Processing Revealed by Individual Differences, Preprint: https://osf.io/5y3tn/files/osfstorage

- **Yang, P.,** (under review). Toward a Unified Framework of 3D Perception and Action: Linking Temporal and Spatial Information in Depth Perception. Book chapter. Preprint: https://osf.io/preprints/osf/mf9bx_v3.
- **Yang, P.,** Saunders, J., & Chen, Z. (under review). Cue reliabilities shape biases of 3D slant perception: evidence for a Bayesian account. Preprint: https://osf.io/preprints/osf/zncx6_v1
- You, Y.*, **Yang, P**.*, & Chen, Z. (2026). Predictability of trajectory modulates manual tracking: from real-time feedback to internal-model-based control. *Cognitive Psychology.* 164, 101798. (*: equal contribution).
- **Yang, P**., Bingham, G. P., & Chen, Z. (2025). The long-term absence of static stereopsis cultivates adaptive planning of reaching-to-grasp. *Investigative Ophthalmology & Visual Science,*66(15):31.
- Bingham, G. P., Herth, R. A., **Yang, P**., Chen, Z., & Wang, X. M. (2022). Investigation of optical texture properties as relative distance information for monocular guidance of reaching. *Vision Research*, *196*, 108029.
- **Yang, P**., Saunders, J. A., & Chen, Z. (2022). The experience of stereoblindness does not improve use of texture for slant perception. *Journal of Vision*, *22*(5), 3-3.
- Chen, J., **Yang, P.,** & Chen, Z. (2020). The effect of the Müller–Lyer configuration on saccadic eye movements is not fully due to illusory perception. *Journal of Neurophysiology*, *124*(3), 856-867