Pei-Ling Yang

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Education

2019 - present	Doctoral candidate, Psychology, University of Illinois Urbana-Champaign (GPA: 4.0/4.0)
2024	Applied M.S., Statistics, University of Illinois Urbana-Champaign (GPA: 4.0/4.0)
2019	M.S., Psychology, University of Illinois, Urbana-Champaign (GPA: 4.0/4.0)
2017	B.S., Psychology, National Taiwan University, Taiwan

Professional Skills

Programming	R, E-Prime, MATLAB (psychotoolbox), Latex, SPSS, Javascript (Jspsych), python
ERP analysis	Neuroscan
Research	Experiment design, Survey design, Data analysis and visualization
Statistics	Hypothesis testing, Cross Validation, Bootstrapping, Factor Analysis, Hierarchical Linear Model, Structural Equation Model, Item Response Theory, Cluster Analyses
Software	Adobe Illustrator, Canvas

Publications

Peer-Review Research Articles

Yang, P. L., & Beck, D. M. (2023). Familiarity influences visual detection in a task that does not require explicit recognition. *Attention, Perception, & Psychophysics, 85*(4), 1127-1149. doi.org/10.3758/s13414-023-02703-7

> Roles: design experiments, program experiments in python and javascript, collect data, analyze data in R, write and submit manuscript

Center, E. G., Gephart, A. M., Yang, P. L., & Beck, D. M. (2022). Typical viewpoints of objects are better detected than atypical ones. *Journal of vision, 22*(12), 1-1. doi:https://doi.org/10.1167/jov.22.12.1

> Roles: collect data, analyze data in R, summarize the results

Chien, S. E., Chu, L., Lee, H. H., Yang, C. C., Lin, F. H., Yang, P. L., ... & Yeh, S. L. (2019). Age difference in perceived ease of use, curiosity, and implicit negative attitude toward robots. *ACM Transactions on Human-Robot Interaction (THRI), 8*(2), 1-19.

> Roles: collect data, summarize the results

Yang, P. L., Tsujimura, S. I., Matsumoto, A., Yamashita, W., & Yeh, S. L. (2018). Subjective time expansion with increased stimulation of intrinsically photosensitive retinal ganglion cells. *Scientific reports, 8*(1), 11693. doi.org/10.1038/s41598-018-29613-1

> Roles: design experiments, program experiments in eprime, collect data, analyze data in R, write and submit manuscript

Yang, Y. H., Tien, Y. H., Yang, P. L., & Yeh, S. L. (2017). Role of consciousness in temporal integration of semantic information. *Cognitive, Affective, & Behavioral Neuroscience, 17*, 954-972.

> Roles: operate EEG and collect EEG data, EEG data pre-processing, edit manuscript

Preprint articles

Clevenger, J., Yang, P. L., & Beck, D. M. (2019). An advantage for targets located horizontally to the cued location. bioRxiv, 740712. doi.org/10.1101/740712

> Roles: design experiments, program experiments in Matlab, collect data, analyze data in R, write manuscript

Yang, P. L., & Beck, D. M. One exemplar Support-Vector Machine in investigation of human scene representativeness (*in preparation*)

Roles: Fit and train SVM models, extract CNN model weights, analyze data in R, write manuscript

Selected Presentations

Oral Presentations

Yang, P. L., & Beck, D. M. (2024). Reliability and validity of categorization tasks. *oral presentation in the Attention and Perception division preseminar of University of Illinois, Urbana-Champaign*

Yang, P. L., & Beck, D. M. (2023). What feature spaces best capture human scene category space? *oral presentation in the Attention and Perception division preseminar of University of Illinois, Urbana-Champaign*

Yang, P. L., & Beck, D. M. (2022). What makes a representative exemplar representative? *oral presentation in the Attention and Perception division preseminar of University of Illinois, Urbana-Champaign*

Yang, P. L., Tsujimura, S., Matsumoto, A., Yamashita, W., & Yeh, S. L. (2017). Time stays still under blue light: Subjective time expansion with increased ipRGC stimulation, *oral presentation in the 17th Asia Pacific Conference on Vision (APCV), Tainan, Taiwan.*

Poster Presentations

Yang, P. L., & Beck, D. M. (2023). The similarity of CNN, behavioral, and PPA feature spaces, *poster presentation in the 23th Annual Meeting of the Vision Sciences Society (VSS, 2023), St. Pete Beach, Florida, U.S.A*

Yang, P. L., & Beck, D. M. (2022). Images that humans rate as highly representative of their category serve *as better training for machine learning, poster presentation in the 22th Annual Meeting of the Vision Sciences Society (VSS, 2022), St. Pete Beach, Florida, U.S.A*

Yang, P. L., & Beck, D. M. (2021). Familiarity influences perception: Famous and Inverted Faces and Logos *, poster presentation in the 29th Annual Meeting of Object Perception, visual Attention, and visual Memory (V-OPAM, 2021)*

Yang, P. L., Center, E. G., & Beck, D. M. (2020) Does statistical regularity influence detection? Famous vs novel logos and canonical vs noncanonical viewpoints*, poster presentation in the 20th Annual Meeting of the Vision Sciences Society (V-VSS, 2020)*

Yang, P. L., Clevenger, J., & Beck, D. M. (2018). A horizontal advantage for attention: enhanced performance for targets located horizontally to an exogenous cue. *poster presentation in the 25th Object Perception, visual Attention, and visual Memory conference (OPAM), New Orleans, USA.*

Yang, P. L., Tsujimura, S., Matsumoto, A., Yamashita, W., & Yeh, S. L. (2018). Subjective time expansion with increased stimulation of intrinsically photosensitive retinal ganglion cells, *poster presentation in the 41th European Conference on Visual Perception (ECVP)*

Awards and Honors

2019 - 2023	Taiwan-UIUC Fellowship
2022 Spring	Graduate College Conference Presentation Award, University of Illinois, Urbana-Champaign, Department of Psychology
2017 July	The Best Student Oral Presentation Award, 17th Asia Pacific Conference on Vision (APCV), Tainan, Taiwan
2017 June	The Bachelor Thesis Dean Award, National Taiwan University
2016 – 2017	Competitive Research grant. funded by Ministry of Science and Technology, Taiwan, for Undergraduate Research (Grant number: MOST105-2815-C-002-036-H)

Professional Experience

2017 – present Attention and Perception Lab, Dept. of Psychology, University of Illinois, Urbana Champaign Mentor: Dr. Diane Beck
- Human category space project: Untangling the factors of human category space construction using various similarity tasks and with the comparison convolution neural network models.
- Rapid familiarity project: Investigating whether the familiarity effect could help facilitate processes of rapid logos and faces detection.
- Spatial attention project: Investigating the off-meridian horizontal advantage using Posner's cuing paradigm

2024 Spring Sensation and Perception PhD Teaching Assistant
- Graded assignments and essay discussions for 320 students, host office hours,
- monitor hybrid class

2023 Fall Introduction to Psychology PhD Teaching Assistant
- Lectures 3 days/week, course material preparation, graded assignments for 48 students
- host office hours

Seminar of cognitive science PhD Teaching Assistant
- Graded 4 exams in essay for 70 students, host office hours

2022 Fall Seminar of cognitive science PhD Teaching Assistant
- Graded 4 exams in essay for 70 students, host office hours

2018 - 2019 Work with Dr. Hans Friedrich Koehn, Quantitative division, Dept. of Psychology, University of Illinois, Urbana Champaign
- Evaluate CDM and GDINA R packages on the performance of various cognitive diagnostic models (e.g., DINA, DINO, GDINA)

2015 – 2017 Explorer of Perception & Attention Lab, Dept. of Psychology, National Taiwan University Mentor: Dr. Su-Ling Yeh
- Blue light and Time perception project: Investigating how blue light influenced perceived duration.
  Funded by Taiwanese government research grant
  Served as the leading role including management of the collaboration with Kagoshima University, Japan, using E-Prime for presentation and R for analyses
  Conducted behavior experiments
  Published a first-author paper
- Consciousness and Semantic project: Investigating whether human can unconsciously process temporal semantic information
  Collaborated and joined a research team
  Qualified as an EEG operator
  Acquired the skill of EEG data preprocessing using Neuroscan