Holly Huey

https://hollyhuey.github.io
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Summary of qualifications

- Full-stack quantative researcher with 6 years of expertise on visual communication, symbolic reasoning, & design
- Highly experienced with leading multiple simultaneous projects and collaborating on large cross-functional teams
- Excellent interpersonal and communication skills for a range of specialist and general audiences

Experience

PhD Experimental Psychology Researcher — University of California, San Diego | *Cognitive Tools Lab*
Sept 2019 – present, San Diego CA

- Lead all stages of design, testing, and analysis on research program investigating
- Leverage large-scale crowdsourcing (mTurk, Prolific, SONA), computer vision, and machine learning techniques to quantitatively measure the visuospatial content of visual representations, spanning drawings to data visualizations
- Given 20+ talks to academic audiences at universties and international conferences and to non-academic audiences
- Collaborate with international cross-functional teams spanning multiple universities and countries to investigate visual abstraction and object recognition across multiple large-scale datasets
- Teach undergrad classes of 300+ students covering statistics (using R), cognitive psychology, and child development

Lead Researcher & Lab Manager — New York University | *Lab for the Developing Mind*
July 2017 – Aug 2019, New York City NY

- Designed experiments and created 3D animations, tested via in-person and online platforms, and analyzed 12+ studies investigating infants, children, and adults' navigation, object recognition, and symbolic reasoning tasks
- Mentored 4 honors thesis and 4 grant-sponsored students, trained/managed teams of 8-12 researchers per semester
- Launched biweekly workshop series to increase computational literacy and research skills among undergrads by teaching design progams (Adobe CC, Blender) and experimental/statistical software (R, PsychoPy, PyHab)

Research Assistant — MIT & Harvard | *Early Childhood Cognition Lab* & *Lab for the Developmental Studies*
Oct 2016 – June 2017, Boston MA

- Conducted visuoperceptual experiments using multiple eye-tracking paradigms to probe reasoning about physical events, and pro-social behavioral tasks to investigate inferences about other agents' mental states and competence

Product Content Writer — Talla, AI Chatbot
Oct 2016 – May 2017, Boston MA

- Analyzed behavioral data on user responses and product performance, wrote articles, e-books, and 20+ workflow templates for HR/IT managers on the advantages and risks of introducing AI automation

Platform Intern — Pillar, Venture Capital Firm (specialized in machine intelligence startups)
Oct 2016 – May 2017, Boston MA

- Analyzed investment value of 100+ startup companies (focused on NLP, IoT, autonomous vehicles, AI healthcare)

Education

University of California San Diego
June 2024 **Ph.D., Experiment Psychology**
Feb 2022 **M.A., Experiment Psychology**

St. John's College (Annapolis, MD)
May 2016 **B.A., Liberal Arts**
Dual major: History of Mathematics & Sciences, Philosophy
Dual minor: Comparative Literature, Classics

Selected Publications *shared authorship

1. **Huey, H.,** Walker, C.M., & Fan, J.E. (under review). Explanatory drawings prioritize functional properties at the expense of visual fidelity.
2. ***Huey, H.,** *Jordan, M., & Dillon,. M.R. (under review). Shortest path problems on different geometric surfaces: Reasoning about linearity through development.
3. ***Huey, H.,** *Long, B., Yang, J., George, K., and Fan, J.E. (2022). Developmental changes in the semantic part structure of drawn objects. Proceedings of the 44th Annual Conference of the Cognitive Science Society.

Experimental Design: Javascript, HTML, CSS, jsPsych
2D and 3D Graphic Design: Adobe CC, Blender, Unity
Software and Tools: git, Latex, Matlab, MongoDB, Node.js
Statistical Modeling: R, Python
Data Analysis: multivariate analyses, linear regressions, mixed effects, ANOVA, chi-square, A/B testing