

Annya Dahmani

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Website: <https://annyadahmani.github.io>

Education

University of California, Berkeley, Berkeley, CA

- Incoming PhD Candidate in the Department of Psychology in Fall 2022
- Advisor: Alison Gopnik
- Recipient of Chancellor's Fellowship

University of California, Los Angeles, Los Angeles, CA

B.S. Cognitive Science with Specialization in Computing; June 2022

- Graduated with Departmental Honors
- Graduated with Cum Laude
- GPA: 3.859

Research Experience

Cognitive Development and Learning Lab, UC Berkeley

August 2022 – Present

PI: Alison Gopnik

Social Cognitive Development Lab, Yale University

August 2021 – August 2022

PI: Yarrow Dunham

Research Assistant

- Project (ongoing): Intergenerational Transmission of Collective Guilt
- Examining the intergenerational difference of guilt and pride: Do the actions of an original group have lasting effects on future generations of that group in the sense of responsibility, guilt, or pride, for an original action?

The Computational Vision and Learning Lab, UCLA

January 2021 – August 2022

PI: Hongjing Lu

Research Assistant

- Investigated how humans learn and reason, and how intelligent machines might emulate them
- Used PsychoPy and JavaScript to build up an experimental test platform for experiments in prior knowledge in high-level cognition in analogical mapping
- Project: Analogical mapping: Designing a task to measure human mapping decisions
- Project (ongoing): Inferring the form and function of causal relations from observed data
 - PI: Patricia Cheng
 - Candidate for UCLA's Psychology Research Opportunity Program

Visual Intelligence Lab, UCLA

September 2020 – August 2022

PI: Tao Gao

Research Assistant

- Explored human social perception and cognition, with a special focus on aspects of the human mind that can inspire the development of artificial intelligence that is communicative and trustworthy
- Conducted literature search, synthesis, and review, manuscript edits, and paper write ups
- Candidate for Senior Honors Thesis through UCLA's Psychology Departmental Honors

Social Cognitive Development Lab, Yale University

June 2021 – August 2021

PI: Yarrow Dunham

Computational Social Cognition Lab, Yale University

PI: Julian Jara-Ettinger

Summer Intern

- Was 1 of 5 applicants of 371 applicants nationwide accepted into the summer internship program
- Attended and participated in lab meetings, statistics workshops, reading groups, in charge of running studies for children ages 3-12 on Zoom, built and edited Qualtrics forms, attended Society for Philosophy and Psychology (SPP) conference
- Projects I worked on included 1) internal social structure, 2) social preferences, 3) collective guilt, 4) institutional and mentalistic stance
- Designed stimuli, literature searches and review, built computational models

Child Development, California State University, Sacramento

June 2017 – September 2017

Summer Intern

- Reviewed journals to collect information for Early Child Development curriculum and research under Professor Kimberly Gordon Biddle
- Edited and conducted research for *Careers in Child and Adolescent Development: A Student's Guide to Working in the Field* (referenced for work in the Acknowledgements section)

Research Interests

- Fields: Developmental Psychology, Cognitive Psychology, Computational Cognition
- Broadly: How do humans make decisions, reason, and learn in our complex social world?
- Specifically: I want to study social and causal learning in children and adults and use computational models to better understand human social cognition
- Questions I hope to address: How can we leverage computational models and experimental approaches to better understand human social cognition? How can we build artificial intelligence that draws directly from human (from childhood to adulthood) intelligent cognition?

Publications and Poster Presentations

Dahmani, Annya, Kaiwen Jiang, and Tao Gao. What is the point? A Theory of Mind Model of Relevance. Poster presentation at: Psychology Undergraduate Research Conference. May, 2022; Los Angeles, CA.

Jiang, Kaiwen, Stephanie Stacy, **Annya L. Dahmani**, Boxuan Jiang, Federico Rossano, Yixin Zhu, and Tao Gao. "What Is the point? a Theory of Mind Model of Relevance." In Proceedings of the Annual Meeting of the Cognitive Science Society, vol. 44, no. 44. 2022.

Zhao, Minglu, Ning Tang, **Annya L. Dahmani**, Yixin Zhu, Federico Rossano, and Tao Gao. "Sharing Rewards Undermines Coordinated Hunting." Journal of Computational Biology (2022).

Zhao, Minglu, Ning Tang, **Annya L. Dahmani**, Ross Richard Perry, Yixin Zhu, Federico Rossano, and Tao Gao. "Sharing is not Needed: Modeling Animal Coordinated Hunting with Reinforcement Learning." In Proceedings of the Annual Meeting of the Cognitive Science Society, vol. 43, no. 43. 2021.

Gordon, K. A., Harven, A. M., & Hudley, C. (2018). *Careers in child and adolescent development: a student's guide to working in the field*. Routledge. **Annya Dahmani** referenced in Acknowledgements section for work.

Honors and Awards

Dean's Honors List

Fall 2018, Winter 2020, Spring 2020, Fall 2020, Spring 2021, Fall 2021, Winter 2022

UCLA Life Sciences Dean's Award for Research *Received February, 2021*

- Two-year paid research grant (totaling \$13,400) awarded by the Life Sciences Department to students who are involved in conducting research and have demonstrated strong academic performance

UCLA Psychology Departmental Honors Program *2021-2022*

- Year-long program where I conducted individual research, culminating in a full senior thesis
- Presented research in a poster presentation at the Psychology Undergraduate Research Conference (PURC) in Los Angeles, CA
- Faculty advisor: Tao Gao

UCLA Psychology Research Opportunity Program *January-June 2022*

- Program for UCLA students who hold high GPAs in the Psychology Department, conduct research, and are underrepresented within graduate school
- Provides students with a \$2,500 stipend so that they can work as a research assistant for 10 hours per week in a UCLA Psychology research lab
- Faculty advisor: Patricia Cheng

Additional Information

Technical Skills: Python, R, Java, MATLAB, JavaScript, CSS, HTML, C++, Perl, PHP, SQL, PsychoPy, Processing, Qualtrics, webPPL

Languages: English (native), French (proficient)