

Andy Liu

andyliu.github.io
andyliu@cs.cmu.edu
Last updated August 27, 2025

Language Technologies Institute
Carnegie Mellon University
5000 Forbes Ave, Pittsburgh, PA 15213

◇ EDUCATION

- 2023 – Present **Carnegie Mellon University**, Pittsburgh, PA
PH.D. IN LANGUAGE AND INFORMATION TECHNOLOGIES
Advisors: Mona Diab, Daniel Fried
Cumulative GPA: 4.08
Relevant Coursework: Large Language Models, Quantitative Evaluation of Language Technologies, Deep Reinforcement Learning, Multimodal Machine Learning, Machine Learning & Game Theory, Advanced Natural Language Processing, Cooperative AI, AI Governance
- 2019 – 2023 **Harvey Mudd College (HMC)**, Claremont, CA
B.S. IN COMPUTER SCIENCE & MATHEMATICS
CONCENTRATION IN SCIENCE, TECHNOLOGY, AND SOCIETY

◇ HONORS & AWARDS

- 2025 NSF GRADUATE RESEARCH FELLOWSHIP
2023 DEPARTMENTAL HONORS, HMC
2019 – 2023 HARVEY S. MUDD MERIT AWARD, HMC
2019 – 2023 LOCKHEED MARTIN STEM SCHOLARSHIP
2019 – 2023 NATIONAL MERIT SCHOLARSHIP

◇ PUBLICATIONS

— Conference Proceedings —

- 2025 Wenkai Li*, Jiarui Liu*, **Andy Liu**, Xuhui Zhou, Mona Diab, and Maarten Sap. “BIG5-CHAT: Shaping LLM Personalities Through Training on Human-Grounded Data.” *Annual Meeting of the Association for Computational Linguistics, 2025*.
- 2025 **Andy Liu***, Abhishek Kulkarni*, Jean-Raphaël Gaglione, Daniel Fried, and Ufuk Topcu. “Dynamic Coalition Structure Detection in Natural-Language-based Interactions.” *The Twenty-Fourth International Conference on Autonomous Agents and Multi-Agent Systems*.
- 2024 **Andy Liu**, Mona Diab, and Daniel Fried. “Evaluating Large Language Model Biases in Persona-Steered Generation.” *Findings of the Annual Meeting of the Association for Computational Linguistics, 2024*.
- 2023 **Andy Liu**, Hao Zhu, Emmy Liu, Yonatan Bisk, and Graham Neubig. “Computational Language Acquisition with Theory of Mind.” *The Eleventh Annual International Conference on Learning Representations*.

— **Workshop Papers** —

2025 Kushal Agrawal*, Verona Teo*, Juan J Vazquez*, Sudarsh Kunnavakkam, Vishak Srikanth, and **Andy Liu**. “Evaluating LLM Agent Collusion in Double Auctions.” *Multi-Agent Systems in the Era of Foundation Models @ ICML 2025*.

◇ **TEACHING**

Fall 2022 NATURAL LANGUAGE PROCESSING (CSCI 159), Teaching Assistant, HMC
Fall 2021 PRINCIPLES OF COMPUTER SCIENCE (CSCI 060), Teaching Assistant, HMC

◇ **INTERNSHIPS & ASSISTANTSHIPS**

— **Industry** —

8/25 – 12/25 **Meta**, Seattle, WA
RESEARCH SCIENTIST INTERN, FAIR Communication & Language
Supervisor: Ruta Desai
Studying the generalizability of training collaborative agents on simulated LLM interactions.

9/22 – 5/23 **eBay**, San Jose, CA
CAPSTONE TEAM PROJECT MEMBER, Member to Member Messaging
Supervisor: Kishore Paul
Developed clustering and sentiment analysis techniques to analyze Member-to-Member messaging on eBay and predict consumer outcomes.

— **Academia** —

1/22 – 5/23 **HMC Department of Computer Science**, Claremont, CA
UNDERGRADUATE RESEARCHER, Lab for CATS (Cognition and Attention over Time and Space)
Advisor: Calden Wloka
Fine-tuned models for action recognition on 3D video input, then used GradCAM-based network visualization techniques to analyze neural network attention and interpret model failure cases.

5/22 – 8/22 **CMU Language Technologies Institute**, Pittsburgh, PA
RESEARCH INTERN, NeuLab
Advisors: Graham Neubig, Yonatan Bisk
Studied computational models of reinforcement learning-based language learning agents to study the influences of theory of mind modeling and environmental pressures on language acquisition.

1/21 – 5/23 **HMC Department of Mathematics**, Claremont, CA
UNDERGRADUATE RESEARCHER, Nonlinear & Complex Systems Research Group
Advisor: Heather Zinn Brooks
Extended existing continuous models of opinion dynamics on a social network to consider cases where agents have different underlying belief systems.