Evan Z. Liu

evanliu@cs.stanford.edu | https://cs.stanford.edu/~evanliu

Education

Stanford University, Stanford, CA   2013–2018, 2019–present
- Ph.D. candidate, Computer Science, focusing on Machine Learning, advised by Chelsea Finn
- M.S. '18, Computer Science specializing in Artificial Intelligence and Security
- B.S. with Honors '18, Computer Science, Mathematics secondary major

Work and Research Experience

Google, *Student Researcher / Research Intern*   6/2019–present
- Proposed a new paradigm for cache replacement, leading to state-of-the-art results (ICML, 2020)

Google Brain, *AI Resident*   6/2018–6/2019
- Designed and implemented a hierarchical reinforcement learning algorithms for systematic exploration and fast transfer, which achieve state-of-the-art results (Exploration in RL workshop, ICML, 2019)

Stanford AI Lab / NLP Group, *Research Assistant with Percy Liang*   3/2016–6/2018
- Designed and implemented a novel reinforcement learning exploration algorithm that outperforms prior algorithms with 100x fewer demonstrations on web-based tasks (ICLR, 2018)
- Implemented state-of-the-art systems for executing natural language commands (ACL, 2017)

Bloomberg, *Software Intern*   6/2015–9/2015
- Created client-facing arbitrary keyword searching, filtering, and sorting on ticketing system

Stanford CS106 Section Leading, *Teaching Assistant (3 Quarters)*   1/2015–9/2017
- Led weekly one-hour session to teach computer science topics to Stanford students
- Graded assignments and exams, and gave feedback to students one-on-one

Stanford Openproof Logic, *Teaching Assistant and Software Developer*   1/2014–6/2015
- Developed and maintained automatic proof-writing software
- Collaborated on designing and launching a formal logic online course (average review 5/5, enrollment over 100), leading weekly office hours to present formal logic topics

Juniper Networks, *Software Intern*   7/2014–8/2014

Selected Publications and Awards

An Imitation Learning Approach for Cache Replacement
Evan Zheran Liu, Milad Hashemi, Kevin Swersky, Parthasarathy Ranganathan, Junwhan Ahn
International Conference on Machine Learning (ICML), 2020

Reinforcement Learning on Web Interfaces using Workflow-Guided Exploration
Evan Zheran Liu*, Kelvin Guu*, Panupong Pasupat*, Tianlin Shi, Percy Liang
International Conference on Learning Representations (ICLR), 2018 (* equal contribution)

From Language to Programs: Bridging Reinforcement Learning and Maximum Marginal Likelihood
Kelvin Guu, Panupong Pasupat, **Evan Zheran Liu**, Percy Liang
Association for Computational Linguistics (ACL), 2017

Co-authored proposal for Stanford AI Lab seed funding (PIs: Percy Liang and Emma Brunskill) [*funded for $120K*]
Co-authored proposal for Amazon Research Awards (PI: Percy Liang) [*funded for $100K*]
Co-authored proposal for Google Faculty Research Awards (PI: Percy Liang) [*funded for ~$100K*]

National Science Foundation Graduate Research Fellowship (NSFGRFP) Recipient, 2018

Reviewer for ICML 2020, NeurIPS 2020, ICLR 2021, Language in Reinforcement Learning (ICML 2020 Workshop), Exploration in Reinforcment Learning (ICML 2019 Workshop)