Laura Smith
Curriculum Vitae

EDUCATION Ph.D. Student in Computer Science

Ph.D. Student in Computer Science University of California, Berkeley

GPA: 3.947/4.00

GPA: 3.967/4.00

2016 - 2020

2020 -

B.A. in Computer Science University of California, Berkeley

Highest Distinction in General Scholarship

Relevant Coursework: Deep Reinforcement Learning (A^+) , Deep Unsupervised Learning (A^+) , Information Theory & Coding* (A^-) , Convex Optimization* (A), Optimization & Approximation (A^+) , Machine Learning (A^+) , Machine Learning Systems (A^+) , Linear System Theory (A), Real Analysis (A), Artificial Intelligence

(A⁺), Probability & Random Processes (A), Discrete Math & Probability Theory (A⁺)

AWARDS

Fellowships

- National Science Foundation Graduate Research Fellowship, 2020-2023
- *EECS Excellence Award*, supplementary fellowship for outstanding academic record, UC Berkeley, 2020-2021

Honors

- CRA Outstanding Undergraduate Researcher Award Finalist, awarded to roughly 20 graduating seniors in computer science from North America, 2019
- NeurIPS Robot Learning Workshop Travel Award, DeepMind, 2019
- Upsilon Pi Epsilon CS Honors Society, UC Berkeley, 2018
- The Leadership Award, Cal Alumni Association, 2016, 2017, 2019

RESEARCH

Graduate Student Researcher

August 2020 – present

Robotics and AI Lab (RAIL), advised by Sergey Levine

Developing intelligent, autonomous systems that learn continually in the real world.

Undergraduate Researcher

May 2018 - May 2020

Robot Learning Lab (RLL), advised by Pieter Abbeel

Developed sample-efficient, vision-based methods, via representation learning and model-based approaches, to enable robot learning in real-world domains.

PUBLICATIONS

Laura Smith*, Ilya Kostrikov*, Sergey Levine. A Walk in the Park: Learning to Walk in 20 Minutes With Model-Free Reinforcement Learning. *Under submission for the International Conference on Robotics and Automation (ICRA)*, 2023. [website]

Laura Smith, J. Chase Kew, Xue Bin Peng, Sehoon Ha, Jie Tan, Sergey Levine. Legged Robots that Keep on Learning: Fine-Tuning Locomotion Policies in the Real World. published at ICRA, 2022. [website]

Vitchyr H. Pong, Ashvin Nair, **Laura Smith**, Catherine Huang, Sergey Levine. Offline Meta-Reinforcement Learning with Online Self-Supervision. *published at the International Conference on Machine Learning (ICML)*, 2022. [website]

Kimin Lee, **Laura Smith**, Anca Dragan, Pieter Abbeel. B-Pref: Benchmarking Preference-Based Reinforcement Learning. *published at NeurIPS 2021*, *Datasets and Benchmarks Track*. [website]

Laura Smith*, Kimin Lee*, Pieter Abbeel. PEBBLE: Feedback-Efficient Interactive RL via Relabeling Experience and Unsupervised Pre-Training. published at ICML 2021 as a long oral presentation (166/5513=3.0%). [website]

Laura Smith, Nikita Dhawan, Marvin Zhang, Pieter Abbeel, Sergey Levine. AVID: Learning Multi-Stage Tasks via Pixel-Level Translation of Human Videos. *published at Robotics Science and Systems (RSS)*, 2020. [website]

Marvin Zhang*, Sharad Vikram*, **Laura Smith**, Pieter Abbeel, Matthew Johnson, Sergey Levine. SOLAR: Deep Structured Latent Representations for Model-Based Reinforcement Learning. *published at ICML*, 2019. [website]

Press Coverage

- Robot dog learns to walk on tough terrain in just 20 minutes, by Alex Wilkins.
 New Scientist. 26 August 2022.
- A technique that allows legged robots to continuously learn from their environment, by Ingrid Fadelli. Tech Xplore. 1 November 2021.
- AVID: a framework to enhance imitation learning in robot, by Ingrid Fadelli. Tech Xplore. 3 January 2020.
- Researchers develop new framework to teach robots, by David Curry. RTInsights. 13 January 2020.

PROFESSIONAL ACTIVITIES

Talks

• BAIR Robotics & Systems Workshop

2022

• Google-BAIR Commons Symposium

2021, 2022

Reviewing

• IEEE Robotics and Automation Letters (RA-L)

2023 2022

- Conference on Neural Information Processing Systems (NeurIPS)

 Benchmarks and Datasets Track
- International Conference on Intelligent Robots and Systems (IROS) 2020, 2022
- International Conference on Robotics and Automation

2022 2022

• International Conference on Learning Representations (ICLR)

Generalizable Policy Learning in Physical World Workshop

Advising — undergraduate research

- Zhiwei Zhang
- Yiming Ni

SERVICE & OUTREACH

UC Berkeley Women in EECS, Board Member

2022 - present

Organizing events for female graduate students in computer science and engineering.

AI Research Mentoring Program, Co-Organizer

2020 - present

Coordinating a research mentoring program for underrepresented undergraduates.

Organized lab tours and assisted with demonstrations at large-scale events. Upsilon Pi Epsilon, Service Committee Member 2018 Held weekly open office hours for lower-division, undergraduate CS courses. **TEACHING** Student Instructor • CS 189/289A: Introduction to Machine Learning Spring 2020 • CS 287: Advanced Robotics Fall 2019 • CS 188: Introduction to Artificial Intelligence Fall 2018, Spring 2019 Course Staff (Reader, Tutor, Lab Assistant) • CS 70: Discrete Mathematics & Probability Theory Spring 2018 • CS C8: Data Science Fall 2017 • CS 61B: Data Structures & Algorithms Spring 2016 Lectures • Imitation Learning, CS 287: Advanced Robotics, UC Berkeley Fall 2019 • Robotics Talk, for CS Education Day Winter 2018

• Artificial Intelligence (Special Topics), CS 10, UC Berkeley

2018 - 2020

Fall 2018

Robot Learning Lab Outreach, Co-Organizer