Kate Rakelly

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Education

University of California, Berkeley (2015 - 2021)
    PhD Electrical Engineering, Artificial Intelligence -- GPA: 3.77 / 4.0
    Advisor: Sergey Levine
University of California, Berkeley (2011 - 2015)
    B.S. Electrical Engineering and Computer Science -- GPA: 3.87 / 4.0
Citizenship: United States

Research and Industry Experience

Cruise, AI Research Team, Research Scientist, April 2022 - August 2023
DeepMind London, Machine Learning Team, Research Scientist Intern, Jan 2021 - June 2021
UC Berkeley Artificial Intelligence Research (BAIR), Research Assistant, Aug 2015 - Dec 2020
Adobe, Creative Technologies Lab, Research Intern, Spring 2015
UC Berkeley Artificial Intelligence Research (BAIR), Undergraduate Research Assistant, 2013 - 2015
Texas Instruments, Webench Team, Applications Engineering Intern, Summer 2012

Publications and Preprints (* denotes equal contribution)

K. Rakelly, A. Gupta, C. Florensa, S. Levine, Which Mutual-Information Representation Learning Objectives are Sufficient for Control?, *Conference on Neural Information Processing Systems (Neurips)*, 2021

T. Zhou*, A. Nagabandi*, **K. Rakelly***, C. Finn, S. Levine, MELD: Meta-Reinforcement Learning from Images via Latent State Models, *Conference on Robot Learning (CoRL)*, 2020

K. Rakelly*, A. Zhou*, D. Quillen, C. Finn, S. Levine, Efficient Off-Policy Meta-Reinforcement Learning via Probabilistic Context Variables, *Intl. Conference of Machine Learning (ICML)*, 2019

K. Rakelly*, E. Shelhamer*, T. Darrell, A. A. Efros, S. Levine, Few-Shot Segmentation Propagation with Guided Networks, *Preprint*, 2018

K. Rakelly, E. Shelhamer, T. Darrell, A. A. Efros, S. Levine, Conditional Networks for Few-Shot Semantic Segmentation, *Intl. Conference on Learning Representations (ICLR) Workshop*, 2018

E. Shelhamer*, **K. Rakelly***, J. Hoffman*, T. Darrell, Clockwork Convnets for Video Semantic Segmentation, *Second Intl. Workshop on Video Segmentation* (ECCV), 2016

S. Ginosar, **K. Rakelly**, S. Sachs, B. Yin, A. A. Efros, A Century of Portraits: A Visual Historical Record of American High School Yearbooks*, Extreme Imaging Workshop, Intl. Conference on Computer Vision (ICCV)*, 2015

Talks

An Inference Perspective on Meta-Reinforcement Learning, invited talk at the *Workshop on Meta-Learning at Neurips*, 2020
    One of six speakers invited to give 30-minute talks

Efficient Off-Policy Meta-Reinforcement Learning via Probabilistic Context Variables, contributed talk at the *Workshop on Structure and Priors in Reinforcement Learning at ICLR*, 2019
    One of two papers from 32 accepted submissions selected for oral presentation at the workshop

The Role of Creativity in Engineering, Jacobs' Design Institute Groundbreaking Ceremony, 2014
    One of three engineering students selected to speak about design and engineering

Teaching Experience

UC Berkeley Teaching Assistant
CS294-112 - Deep Reinforcement Learning, Fall 2018
    Head TA, held office hours, created assignments, graded assignments
CS70 - Discrete Mathematics for Computer Science, Summer 2014
    Taught two weekly discussion sections, created assignments and exams
EE100 - Introduction to Microelectronic Circuits, Summer 2013
    Taught two weekly discussion sections, created assignments and exams

Guest Lectures
CS285: Deep Reinforcement Learning, UC Berkeley, Fall 2019
    Introduction to Meta-Reinforcement Learning
CS330: Deep Multi-Task and Meta-Learning, Stanford University, Fall 2019
    Exploration in Meta-Reinforcement Learning
CS188 Introduction to Artificial Intelligence, UC Berkeley, Summer 2018
    Learning Image Segmentation from Limited Labeled Data

Mentoring

Undergraduate Researchers
Tony Z. Zhao (now PhD student at Stanford University)
Aurick Zhou (now at Waymo)
Gaoyue Zhou (now PhD student at NYU)
Justin Lin
Julia Huang
Jane Liang

Outreach

BAIR Undergraduate Mentoring Program, Organizer and Mentor, 2018 - 2020
    Pairs undergraduates from underrepresented groups interested in AI with graduate student mentors.
CS KickStart Program, Organizer and Content Creator, 2011 - 2014
    One week program for incoming female freshmen interested in pursuing computer science.
Pioneers in Engineering, Kit Developer, 2012 - 2013
    A low-cost robotics competition run by college students for local underserved high schools.

Professional Activities

Workshop Organization
Beyond Tabula Rasa in RL Workshop: Agents that Adapt and Generalize, lead organizer, ICLR 2020
Workshop on Robotic Learning, junior organizer, NeurIPS 2019

Paper Reviewing
International Conference of Machine Learning, 2019, 2020
International Conference on Learning Representations, 2019, 2020, 2021
Conference on Robotic Learning, 2019, 2020
Neural Information Processing Systems, 2019
Conference on Computer Vision and Pattern Recognition, 2019

Honors and Awards

National Science Foundation GRFP Honorable Mention, 2017
Sandisk Fellowship, 2016

EECS Excellence Award, 2015
Bachelor of Science with High Honors, 2015
  Awarded to the top 10% of EECS students by GPA