

Kate Rakelly

rakelly@eecs.berkeley.edu • +1 760-681-9573 • katerakelly.github.io

Education

University of California, Berkeley (2015 - 2020)

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

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?, *Preprint*, 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 PhD student at UC Berkeley)

Gaoyue Zhou (now master's student at CMU)

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