Ashwin Balakrishna

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Google Scholar: https://scholar.google.com/citations?user=tfN6V84AAAAJ&hl

BACKGROUND Broadly speaking, I am excited about working on problems that involve data-driven decision making. I am currently a Senior Research Scientist at Nuro working on using ideas from reinforcement and imitation learning for autonomous delivery.

WORK EXPERIENCE

Nuro, Senior Research Scientist (Machine Learning) — Aug 2022 - Present
Toyota Research Institute, Research Intern (Machine Learning) — Sep - Dec 2021
SpaceX, Software Engineering Intern (Avionics) — Jun - Sep 2017
Intel, Hardware Engineering Intern (Power Electronics) — Jun - Sep 2016

EDUCATION

UC Berkeley, Berkeley, CA — Aug 2018 - May 2022
Ph.D. in Computer Science
Research: Algorithms for Safe and Efficient Online Robot Learning
Advisor: Ken Goldberg

California Institute of Technology, Pasadena, CA — Sep 2014 - Jun 2018
Bachelor of Science in Electrical Engineering
Advisors: Steven Low and Hyuck Choo

SELECTED PUBLICATIONS

Brijen Thananjeyan*, **Ashwin Balakrishna***, Suraj Nair, Michael Luo, Krishnan Srinivasan, Minho Hwang, Joseph E. Gonzalez, Julian Ibarz, Chelsea Finn, Ken Goldberg. Recovery RL: Safe Reinforcement Learning with Learned Recovery Zones. *Robotics and Automation Letters (RA-L) and International Conference on Robotics and Automation (ICRA)* 2021.

Albert Wilcox, **Ashwin Balakrishna**, Jules Dedieu, Wyame Benslimane, Daniel S. Brown, Ken Goldberg. Monte Carlo Augmented Actor-Critic for Sparse Reward Deep Reinforcement Learning from Suboptimal Demonstrations. *Conference on Neural Information Processing Systems (NeurIPS)* 2022.

Brijen Thananjeyan*, **Ashwin Balakrishna***, Ugo Rosolia, Felix Li, Rowan McAllister, Joseph E. Gonzalez, Sergey Levine, Francesco Borrelli, Ken Goldberg, Safety Augmented Value Estimation from Demonstrations (SAVED): Safe Deep Model-Based RL for Sparse Cost Robotic Tasks. *Robotics and Automation Letters (RA-L) and International Conference on Robotics and Automation (ICRA)* 2020.

TEACHING

UC Berkeley, Graduate Student Instructor — Jan - May 2022
CS 189: Introduction to Machine Learning
UC Berkeley, Graduate Student Instructor — Jun - Aug 2021
CS 188: Introduction to Artificial Intelligence
Caltech, Undergraduate Teaching Assistant — Sep - Dec 2017
EE 111: Signal-Processing Systems and Transforms

AWARDS & HONORS

Timothy B. Campbell Innovation Award (Berkeley EECS) — 2020-2021
National Science Foundation Graduate Research Fellowship — 2018-2021
Henry Ford II Scholar Award (Top GPA in EE at Caltech) — 2017