## **Archit Sharma**

☑ architsh@stanford.edu • ② architsharma97.github.io

## **Education**

**Stanford University** 

PhD in Computer Science, Advisor: Chelsea Finn Sep' 20 – Present

IIT Kanpur

B.Tech in Electrical Engineering, GPA: 9.9/10 Jul' 14 – Jun' 18

Minors: Machine Learning, Linguistics

Experience

Google Mountain View, CA

AI Resident Jul' 18 – Dec' 20

Deep reinforcement learning.

IIT Kanpur Kanpur, India

Undergraduate Researcher, Supervisor: Piyush Rai

Aug' 17 – Apr' 18

Expectation maximization algorithms for mixture-of-experts.

Mila - Quebec Artificial Intelligence Institute

Montreal, QC, Canada

Research Intern, Supervisor: Yoshua Bengio Ma

Gradient estimation across discrete latent variables in deep neural networks.

May' 17 – Aug' 17

## **Articles**

Annie Chen, **Archit Sharma**, Sergey Levine, and Chelsea Finn. *You Only Live Once: Single-Life Reinforcement Learning via Reward Shaping*. (*Under Review*) Neural Information Processing Systems (NeurIPS), 2022.

Annie Xie\*, Fahim Tajwar\*, **Archit Sharma**\*, and Chelsea Finn. *When to Ask for Help: Proactive Interventions in Autonomous Reinforcement Learning*. (*Under Review*) Neural Information Processing Systems (NeurIPS), 2022.

**Archit Sharma**\*, Rehaan Ahmad\*, and Chelsea Finn. *A State-Distribution Matching Approach to Non-Episodic Reinforcement Learning*. International Conference on Machine Learning (ICML), 2022.

**Archit Sharma\***, Kelvin Xu\*, Nikhil Sardana, Karol Hausman, Sergey Levine, and Chelsea Finn. *Autonomous Reinforcement Learning: Formalism and Benchmarking*. International Conference on Learning Representations (ICLR), 2022.

**Archit Sharma**, Abhishek Gupta, Sergey Levine, Karol Hausman, and Chelsea Finn. *Autonomous Reinforcement Learning via Subgoal Curricula*. Neural Information Processing Systems (NeurIPS), 2021.

Behzad Haghgoo\*, Allan Zhou\*, **Archit Sharma**, and Chelsea Finn. *Discriminator Augmented Model-based Reinforcement Learning*. arXiv preprint, 2021.

Jongwook Choi, **Archit Sharma**, Sergey Levine, Honglak Lee, and Shixiang Gu. *Variational Empowerment as Representation Learning for Goal-Conditioned Reinforcement Learning*. International Conference on Machine Learning (ICML), 2021.

**Archit Sharma**, Michael Ahn, Sergey Levine, Vikash Kumar, Karol Hausman, and Shixiang Gu. *Emergent Real-World Robotic Skills via Unsupervised Off-Policy Reinforcement Learning*. Robotics: Science and Systems (RSS), 2020.

**Archit Sharma**, Shixiang Gu, Sergey Levine, Vikash Kumar, and Karol Hausman. *Dynamics-Aware Unsupervised Discovery of Skills*. International Conference on Learning Representations (ICLR), 2020 (Oral Presentation, <2% rate).

**Archit Sharma\***, Siddhartha Saxena\*, and Piyush Rai. *A flexible probabilistic framework for large-margin mixture of experts*. Machine Learning (2019) 108: 1369, 2019.

## **Honors**

General Proficiency Medal	2018
Graduating with the highest GPA among EE graduates.	
Motorola Gold Medal	2018
Overall achievement among CS/EE graduates.	
Proficiency Prize	2018
Outstanding Undergraduate Research.	
Lalit Narain Das Memorial Scholarship	2018
Best Senior Student in Electrical Engineering, IIT Kanpur	
Sri Singhasan Singh Scholarship	2017
Highest GPA in Electrical Engineering, IIT Kanpur	
Academic Excellence Award	2015, 2016, 2017
Equivalent to Dean's list.	
Joint Entrance Examination	2014
All India Rank 376 out of 150,000 students.	
National Talent Search Scholarship (NTSE)	2010
Awarded to 1000 students by Govt. of India.	