

# ROIL – Robust Offline Imitation Learning

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# Introduction

- ▶ IL is a learning paradigm where an agent learns a policy from expert demonstrations.
- ▶ We model the domain as a Markov Decision Process (MDP)  $(\mathcal{S}, \mathcal{A}, \mathcal{P}, p_0, r, \gamma)$ .
- ▶ We aim to perform well, even in the presence of covariate shift – where the experts state visitation distribution does not follow their own –.

# Preliminaries

$$\rho(\pi, r) = \lim_{T \rightarrow \infty}$$