

Assignment 1: imitation learning report

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1 Behaviorial cloning

1.1

1.2

Metric	Ant	Ant imitation	Hopper	Hopper imitation
EvalAvgReturn	4713.6	1345.6 (28.5%)	3772	895 (23.7%)
EvalStdReturn	0 (expert)	477.1	0	232

Evaluation batch size = 5000, Epoch length = 1000. We used the same resources for training on the ant and on the humanoid. The performance seems to show that it is easier to imitate an ant than an humanoid with fixed resources.

1.3

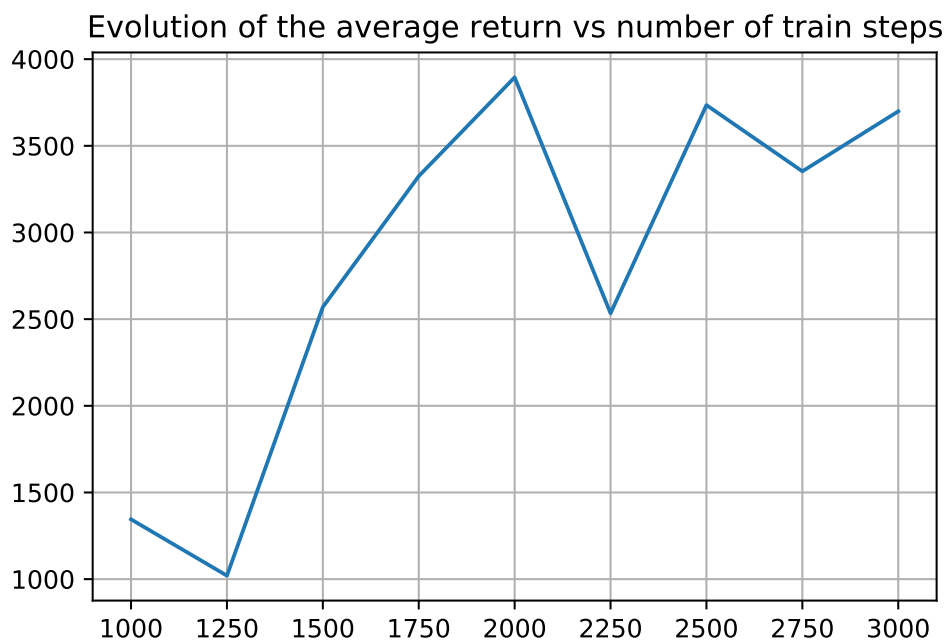


Figure 1: We chose to make this hyperparameter vary because it corresponds to allowing more resources to the agent to learn

2 DAgger

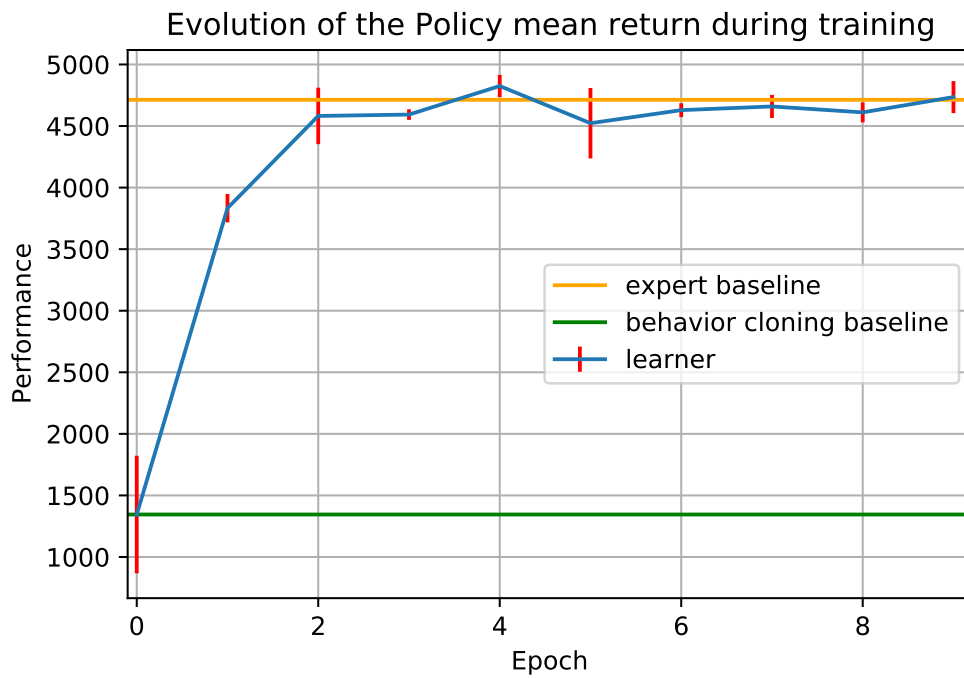


Figure 2: Evolution of the performance for the ant

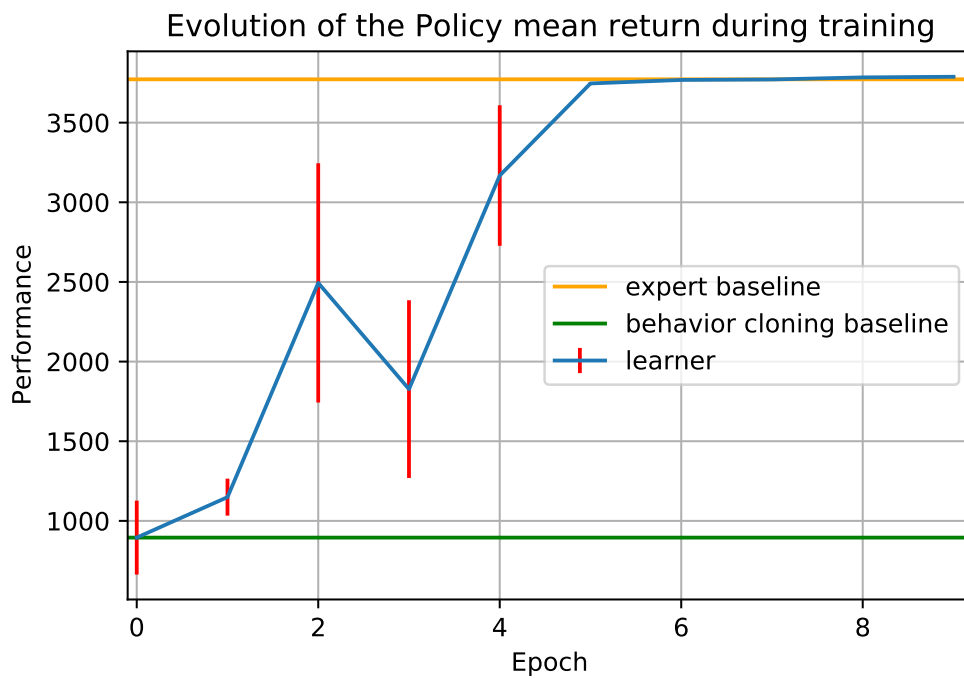


Figure 3: Evolution of the performance for the hopper