sewts

Weekly Review

20/04/21

- **Tasks**
- Rewards were not representing transitions very well – Updated rewards ✓
- Displaying network output plots ✓
- Ran custom SAC with environment cloth_corner.py (from original repo) ✓
- Understand why the value and entropy become empty ⚠ ***In progress***
- **Problems**
- Value output and entropy become *empty* after just a couple of iterations
- **To-Do Items for Next Week**
- Understand why the value and entropy become empty
- Compare custom SAC implementation with rlpyt implementation
- **To-Do Later**

RL Problem for obtaining one flat seam

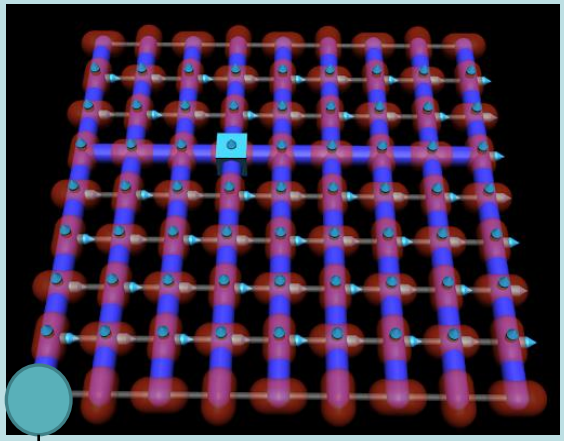
13/04/21

Goal

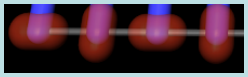
Obtain one flat seam

Given

Cloth in mujoco represented by 64 particles in 8*8 grid



Observations



[x,y,z] positions of 4 points adjacent to corner 1

Actions

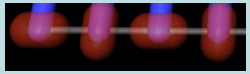
Random [x,y] movement of corner 1

RL Problem for obtaining one flat seam

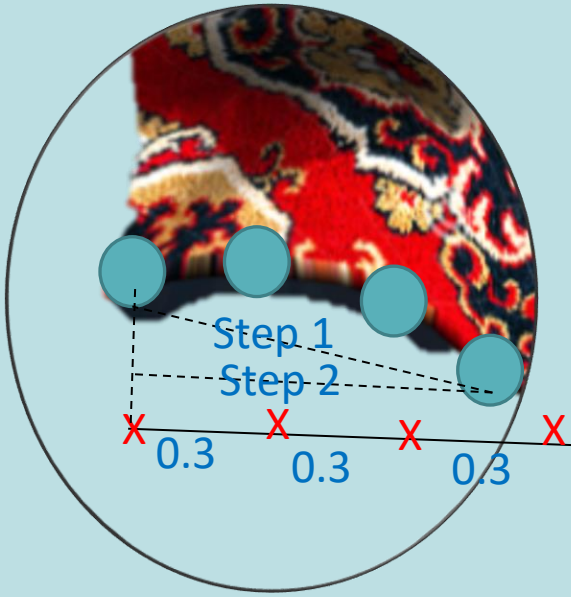
13/04/21

Goal

Obtain one flat seam -> Corner particle + 3 adjacent particles in a straight line



Reward



1. Join 1st point and last point
2. Project on x,y plane
3. Reward is proportional to :

(1 -1 * (x,y,z) distance from the ideal line)*10

Updated reward

Updated reward definition such that it gives a reward of > 9 for flat position but very low values for other positions -> added weight factors for x,y,z components (more weight for z divergence)

sewts

THANK YOU