

In-class

12/07

$$t = 8 ; c = 100$$

$$\epsilon = e^{-[8-0]/100} = e^{-7/100} = 0.93$$

Random number = 0.76

① Agent move the cart randomly

② random number $< \epsilon$

③ Huber loss

Average of L_S of all samples

$$L_S(y, f(x)) = \begin{cases} \frac{1}{2}(y - f(x))^2 & \text{if } |y - f(x)| \leq S \\ S|y - f(x)| - \frac{1}{2}S^2 & \text{otherwise} \end{cases}$$

$S = 1$

Action	(y) Target	f(x) Pred	$ y - f(x) $	L_S
L	8	9	1	0.5
L	7	6	1	0.5
L	4	3	1	0.5
L	9	8	1	0.5
L	3	3	0	0
R	4	5	1	0.5
R	2	4	2	1.5
R	3	6	3	2.5
R	8	8	0	0
R	3	9	6	5.5

Sum = 12

$$\text{Huber loss} = 12/10 = 1.2$$