

Pacman Homework Report

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1.

DQN 由 DeepMind 提出，其核心思想是使用深度神經網絡來近似 Q 函數，其中 Q 函數衡量在給定狀態下採取某個動作的價值。演算法的核心為簡單的利用過去與最近的權重平均值來迭代更新數值。

2.

Conv2dBlock (custom layer)

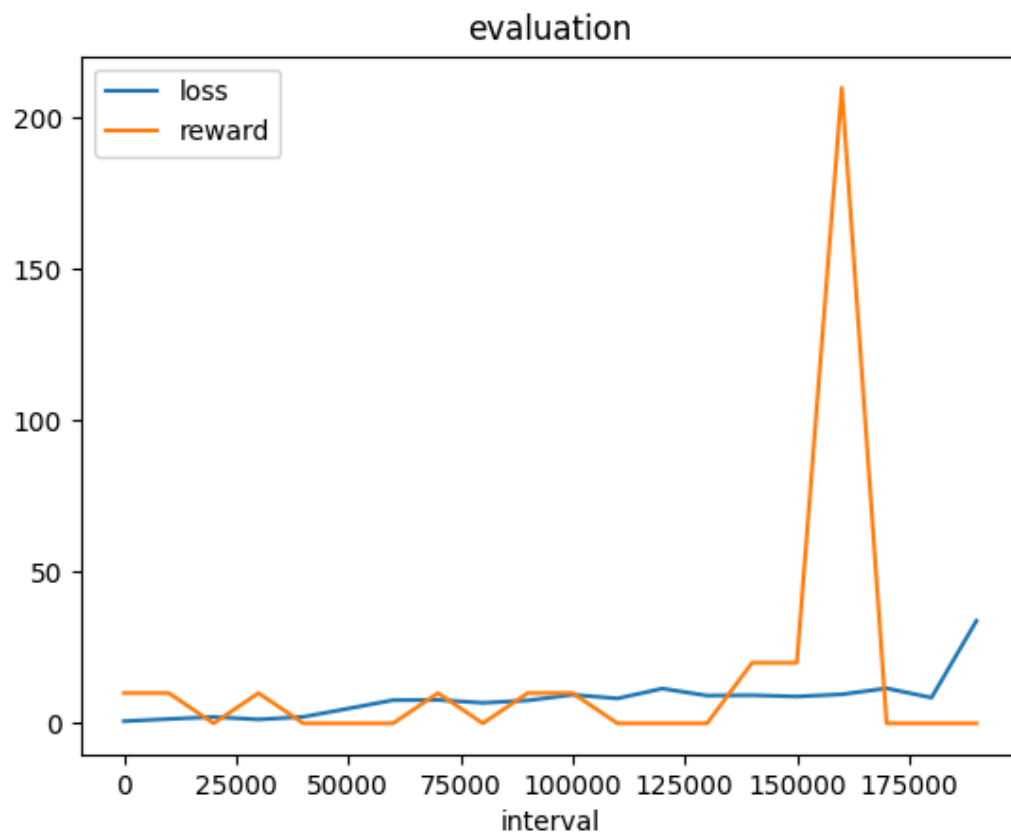
Encapsulating Conv2d, BatchNorm2d, and LeakyReLU. The number of parameter is as same as Conv2d.

Layer
Conv2d
BatchNorm2d
LeakyReLU

Full Model Layer

Layer	in dim	out dim	kernel size	stride	padding
Conv2dBlock 1	4	32	(8, 8)	2	2
Conv2dBlock 2	32	64	(4, 4)	2	1
Conv2dBlock 3	64	64	(2, 2)	2	0
Flatten	start_dim=1				
Linear 1	64 * (10 * 10)	256			
LeakyReLU					
Linear 2	256	64			
LeakyReLU					
Linear 1	64	9			

3.



4.

