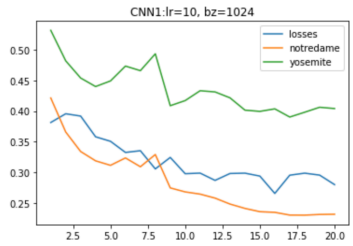
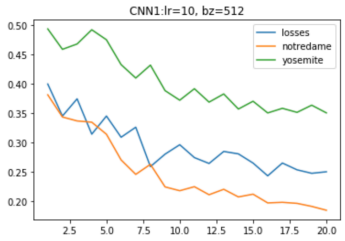
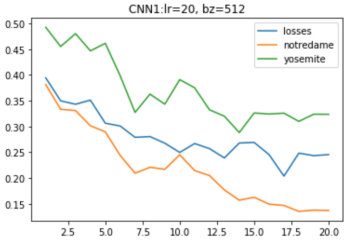
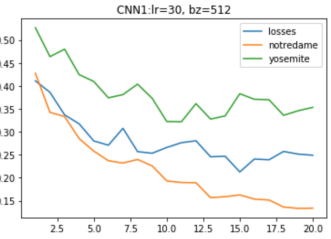
Report
CS537 Homework 1
Ting-Liang Huang

CNN1:





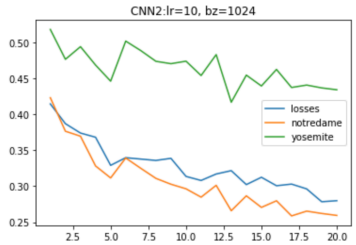


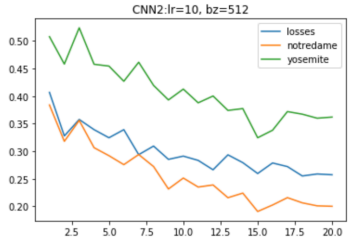


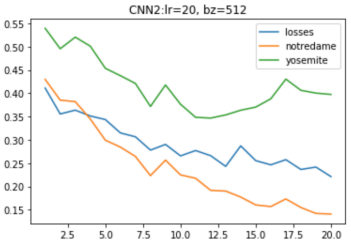
	Loss	Notredame FPR95	Yosemite FPR95
lr=10, bz=1024	0.2654	0.23	0.39
lr=10, bz=512	0.2432	0.1846	0.3504
lr=20, bz=512	0.2037	0.1351	0.2882
lr=30, bz=512	0.2126	0.1333	0.3218

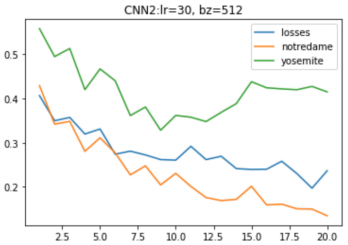
```
DesNet(
  (features): Sequential(
    (0): Conv2d(1, 32, kernel_size=(3, 3), stride=(2, 2), padding=(1, 1), bias=False)
    (1): BatchNorm2d(32, eps=1e-05, momentum=0.1, affine=False, track_running_stats=True)
    (2): ReLU()
    (3): Conv2d(32, 128, kernel_size=(3, 3), stride=(2, 2), padding=(1, 1), bias=False)
    (4): BatchNorm2d(128, eps=1e-05, momentum=0.1, affine=False, track_running_stats=True)
    (5): ReLU()
    (6): Dropout(p=0.3, inplace=False)
    (7): Conv2d(128, 128, kernel_size=(8, 8), stride=(1, 1), bias=False)
    (8): BatchNorm2d(128, eps=1e-05, momentum=0.1, affine=False, track_running_stats=True)
  )
)
```

CNN2:





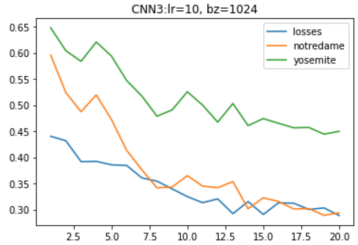


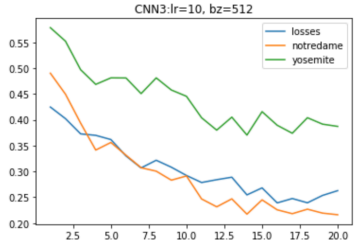


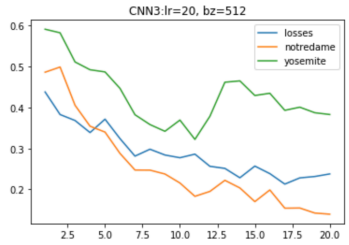
	Loss	Notredame FPR95	Yosemite FPR95
lr=10, bz=1024	0.2784	0.2587	0.4171
lr=10, bz=512	0.2552	0.1908	0.3245
lr=20, bz=512	0.2211	0.1408	0.3468
lr=30, bz=512	0.1973	0.1349	0.3282

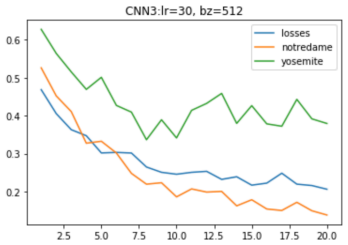
```
DesNet_2(
  (features): Sequential(
    (0): Conv2d(1, 32, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
    (1): BatchNorm2d(32, eps=1e-05, momentum=0.1, affine=False, track_running_stats=True)
    (2): ReLU()
    (3): Conv2d(32, 64, kernel_size=(3, 3), stride=(2, 2), padding=(1, 1), bias=False)
    (4): BatchNorm2d(64, eps=1e-05, momentum=0.1, affine=False, track_running_stats=True)
    (5): ReLU()
    (6): Dropout(p=0.3, inplace=False)
    (7): Conv2d(64, 128, kernel_size=(3, 3), stride=(2, 2), padding=(1, 1), bias=False)
    (8): BatchNorm2d(128, eps=1e-05, momentum=0.1, affine=False, track_running_stats=True)
    (9): ReLU()
    (10): Dropout(p=0.3, inplace=False)
    (11): Conv2d(128, 128, kernel_size=(8, 8), stride=(1, 1), bias=False)
    (12): BatchNorm2d(128, eps=1e-05, momentum=0.1, affine=False, track_running_stats=True)
  )
)
```

CNN3:









	Loss	Notredame FPR95	Yosemite FPR95
lr=10, bz=1024	0.2886	0.289	0.4444
lr=10, bz=512	0.2391	0.2162	0.3704
lr=20, bz=512	0.213	0.1395	0.3222
lr=30, bz=512	0.2059	0.138	0.3365

```
DesNet_3(
  (features): Sequential(
    (0): Conv2d(1, 32, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
    (1): BatchNorm2d(32, eps=1e-05, momentum=0.1, affine=False, track_running_stats=True)
    (2): ReLU()
    (3): Conv2d(32, 32, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
    (4): BatchNorm2d(32, eps=1e-05, momentum=0.1, affine=False, track_running_stats=True)
    (5): ReLU()
    (6): Dropout(p=0.3, inplace=False)
    (7): Conv2d(32, 64, kernel_size=(3, 3), stride=(2, 2), padding=(1, 1), bias=False)
    (8): BatchNorm2d(64, eps=1e-05, momentum=0.1, affine=False, track_running_stats=True)
    (9): ReLU()
    (10): Dropout(p=0.3, inplace=False)
    (11): Conv2d(64, 64, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
    (12): BatchNorm2d(64, eps=1e-05, momentum=0.1, affine=False, track_running_stats=True)
    (13): ReLU()
    (14): Dropout(p=0.3, inplace=False)
    (15): Conv2d(64, 128, kernel_size=(3, 3), stride=(2, 2), padding=(1, 1), bias=False)
    (16): BatchNorm2d(128, eps=1e-05, momentum=0.1, affine=False, track_running_stats=True)
    (17): ReLU()
    (18): Dropout(p=0.3, inplace=False)
    (19): Conv2d(128, 128, kernel_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False)
    (20): BatchNorm2d(128, eps=1e-05, momentum=0.1, affine=False, track_running_stats=True)
    (21): ReLU()
    (22): Dropout(p=0.3, inplace=False)
    (23): Conv2d(128, 128, kernel_size=(8, 8), stride=(1, 1), bias=False)
    (24): BatchNorm2d(128, eps=1e-05, momentum=0.1, affine=False, track_running_stats=True)
  )
)
```