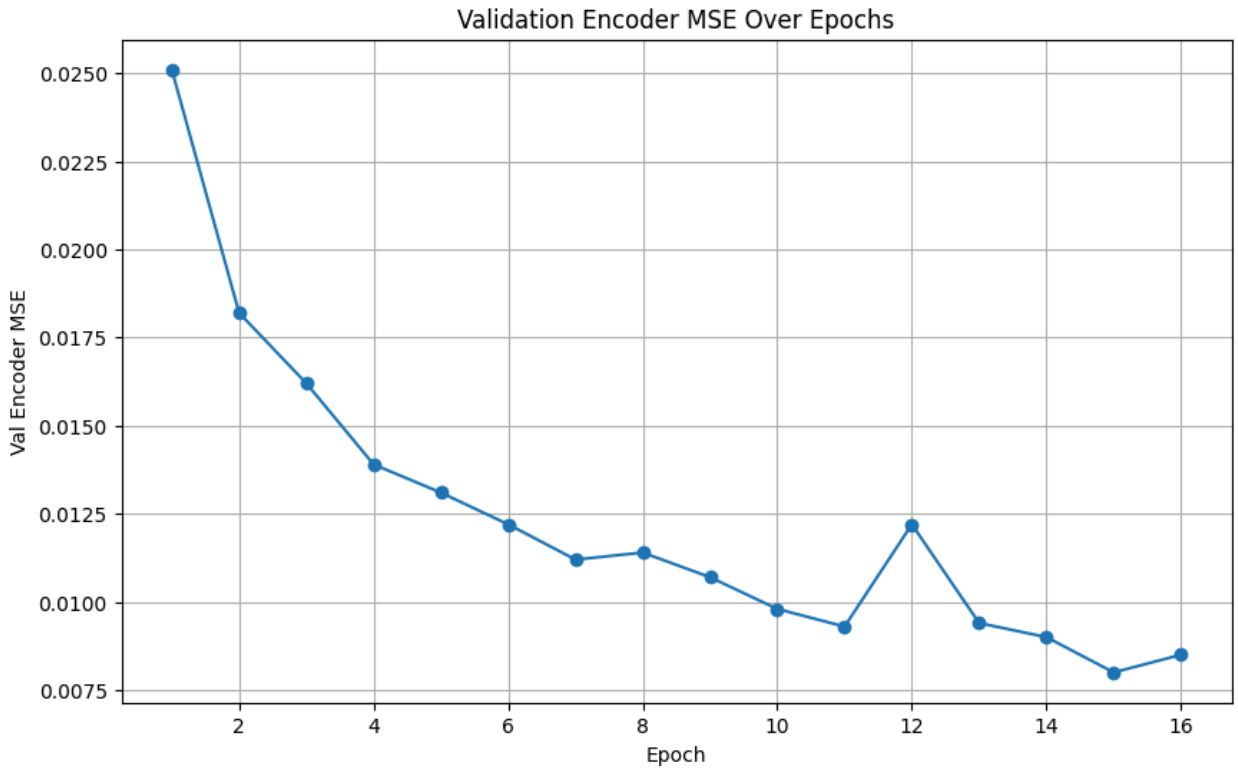
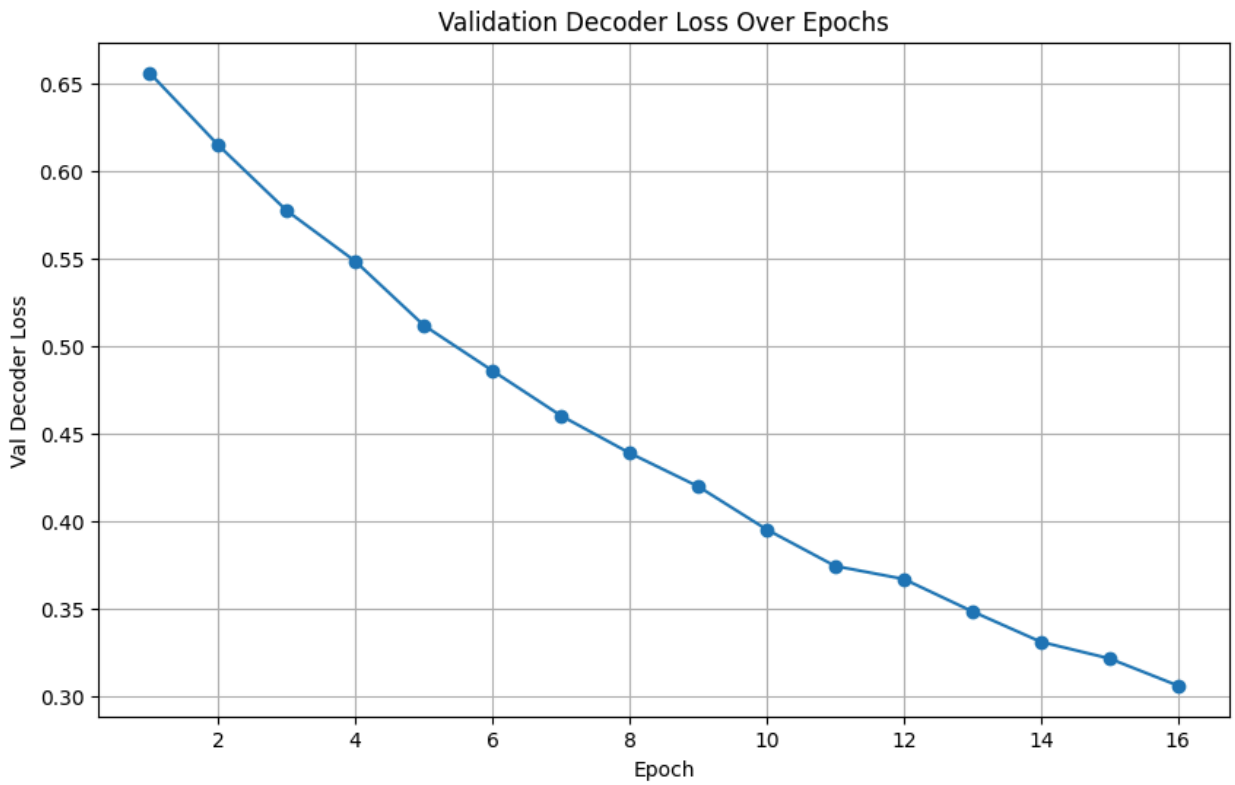
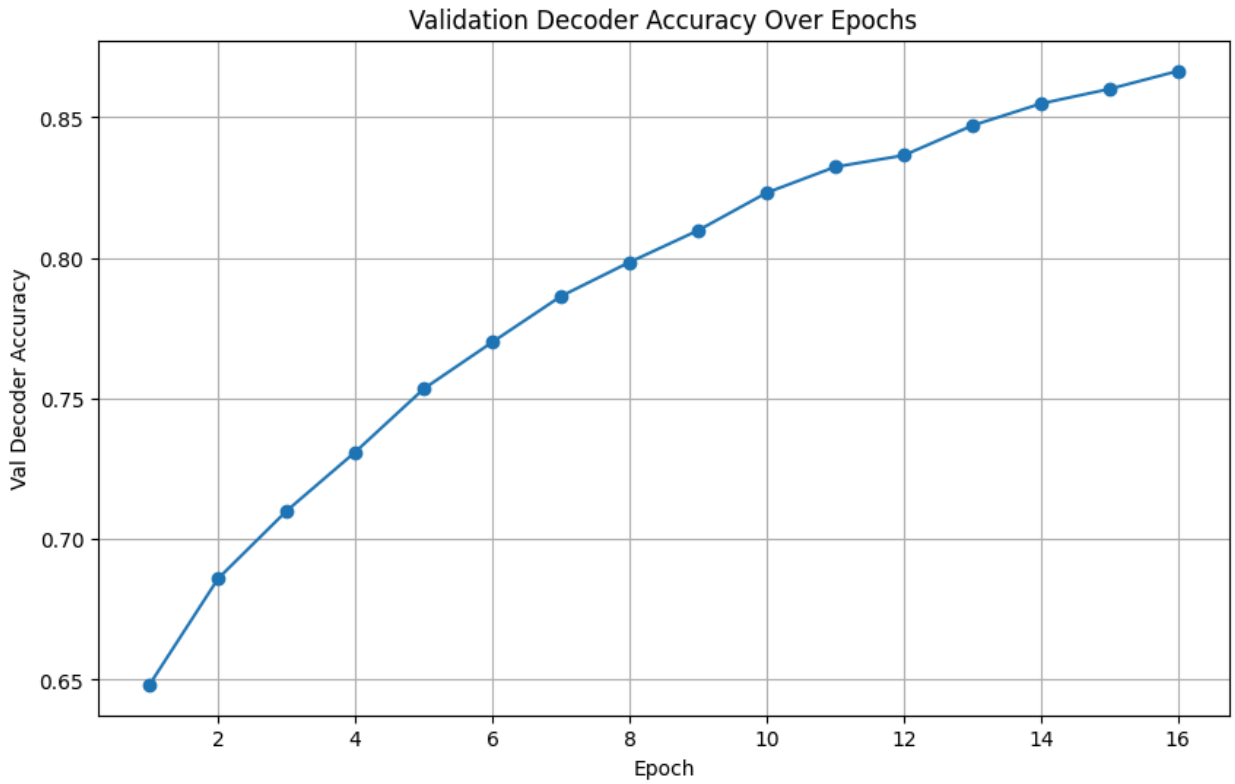
Experiment details

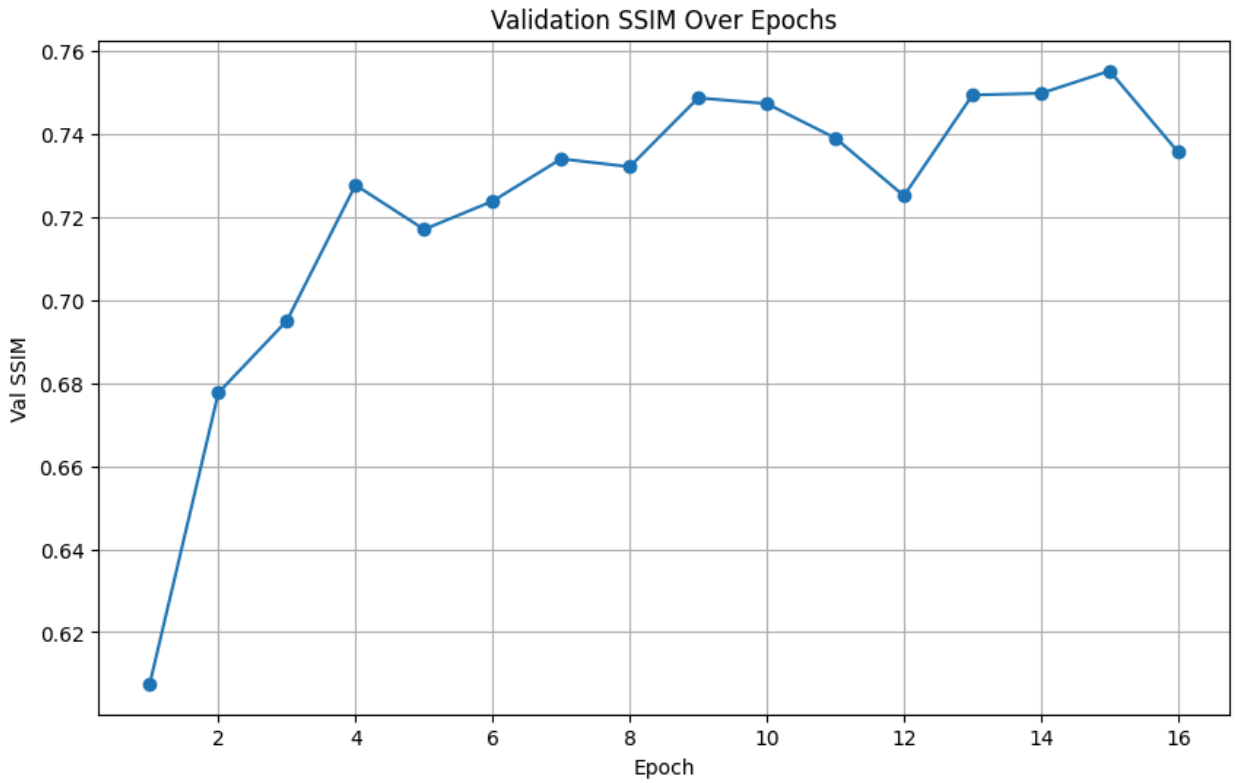
Batch size: 16
Number of epochs: 16
GPU: A100

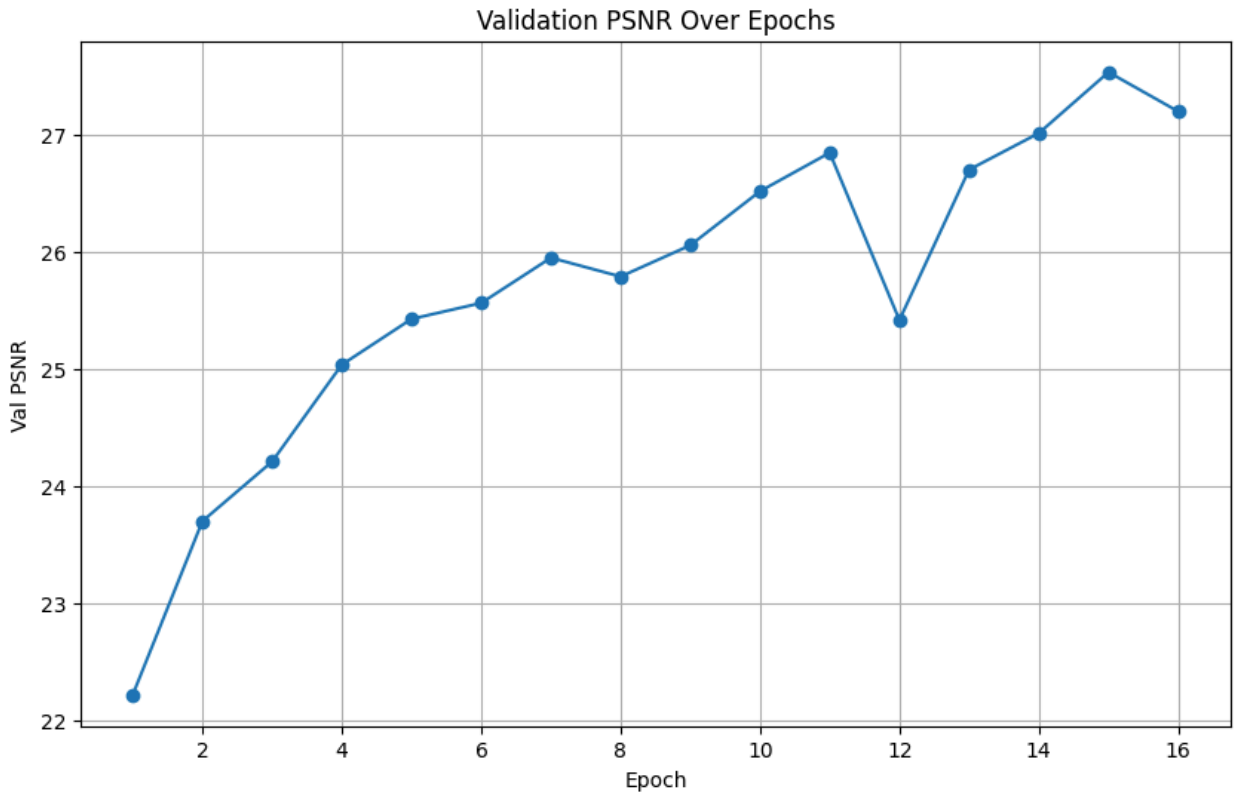
TEST run with basic critic

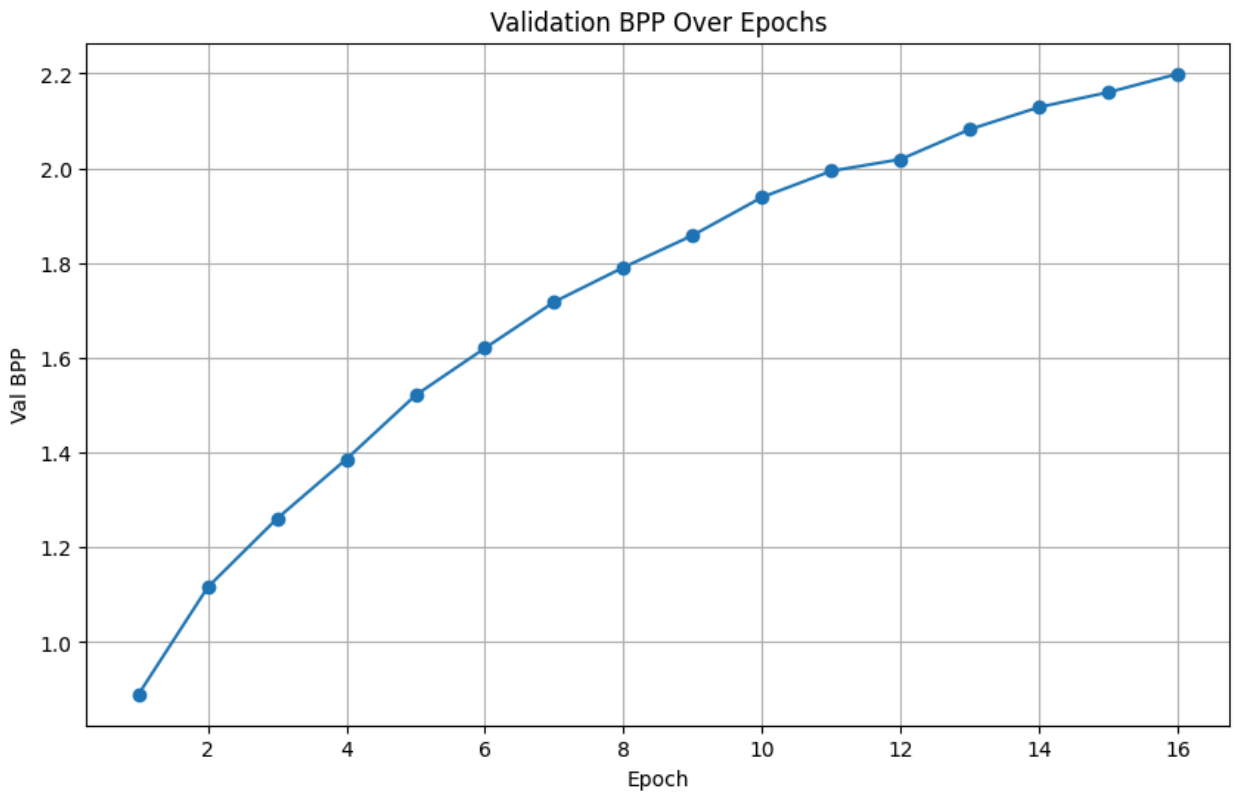



Validation Decoder Loss Over Epochs
Val Decoder Loss
0.65
0.60
0.55
0.50
0.45
0.40
0.35
0.30
2
4
6
8
10
12
14
16
Epoch

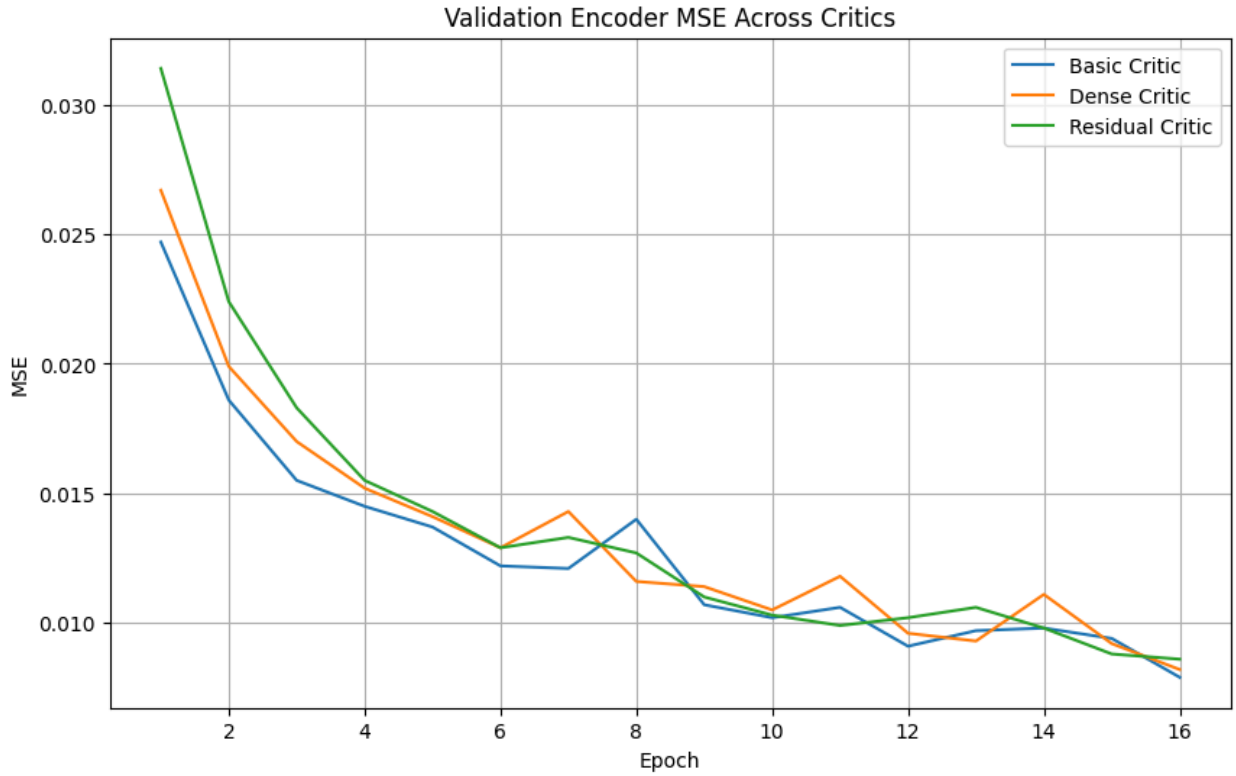

Validation Decoder Accuracy Over Epochs
Val Decoder Accuracy
0.85
0.80
0.75
0.70
0.65
2
4
6
8
10
12
14
16
Epoch

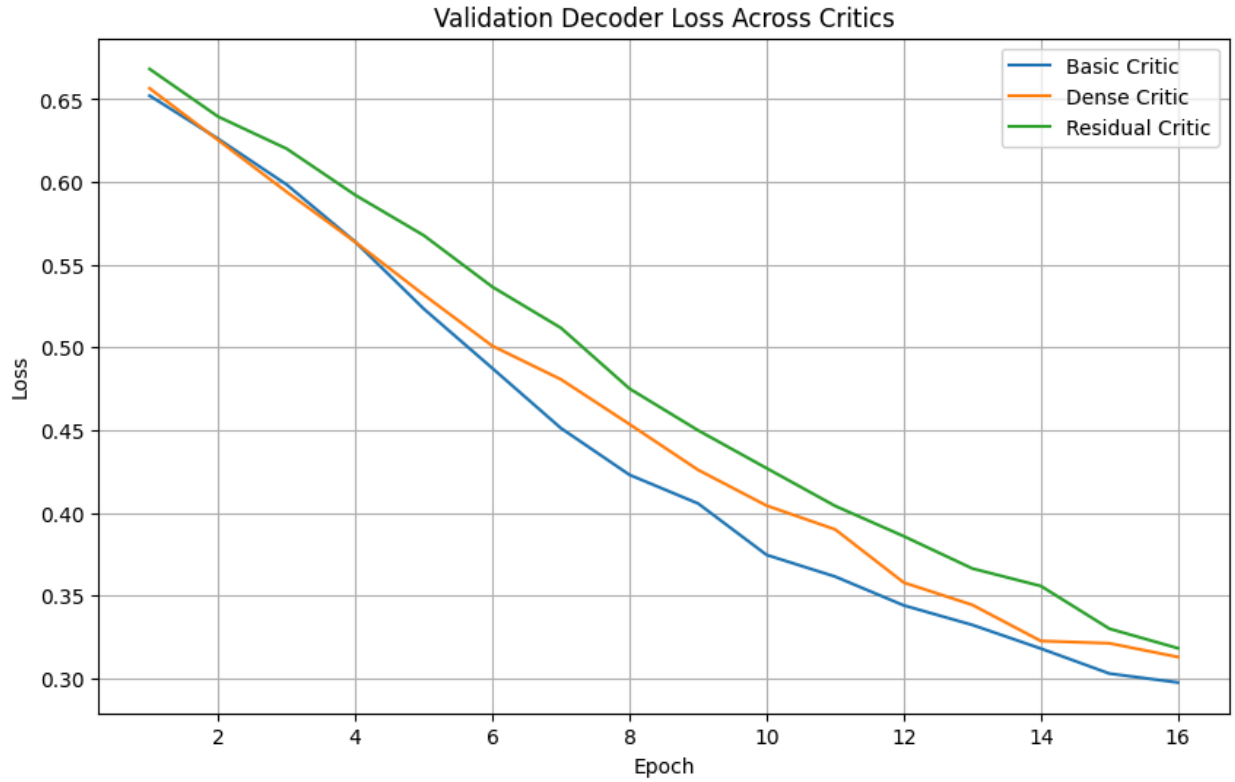

Validation SSIM Over Epochs
Val SSIM
Epoch
0.76
0.74
0.72
0.70
0.68
0.66
0.64
0.62
2
4
6
8
10
12
14
16

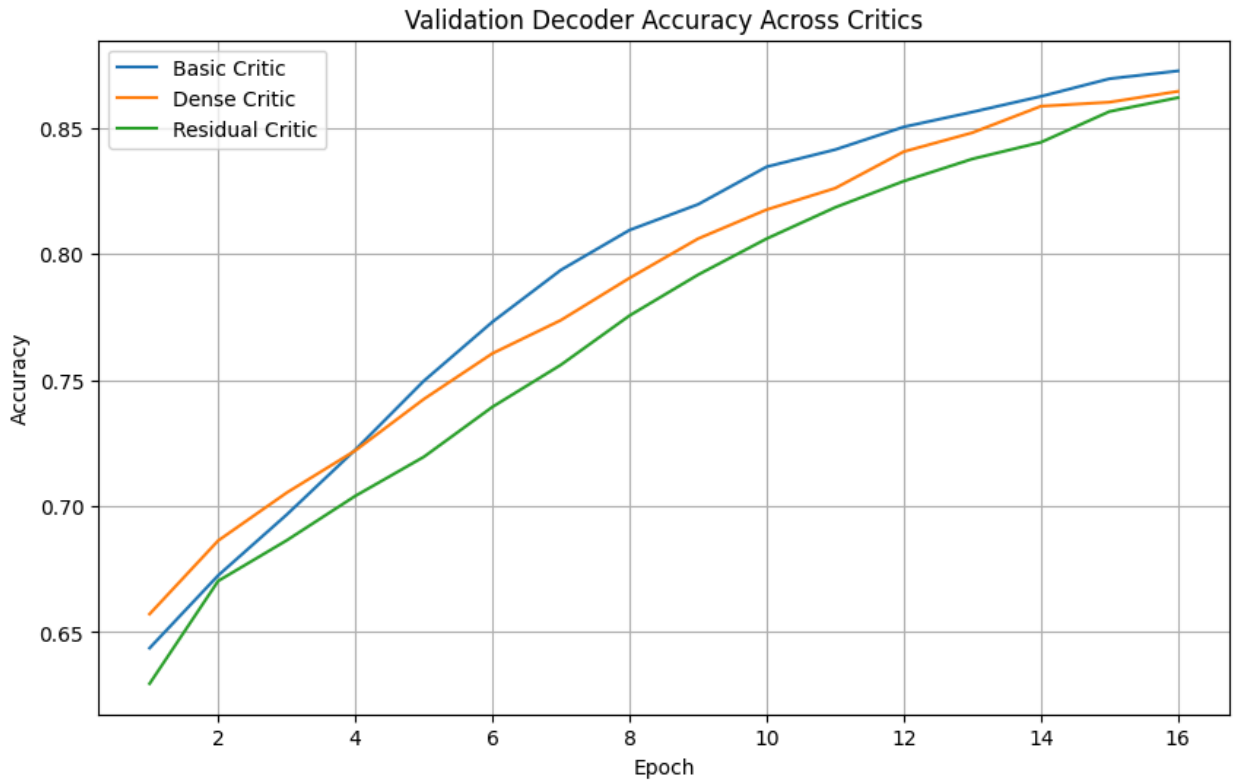

Validation PSNR Over Epochs
Val PSNR
Epoch
27
26
25
24
23
22
2
4
6
8
10
12
14
16

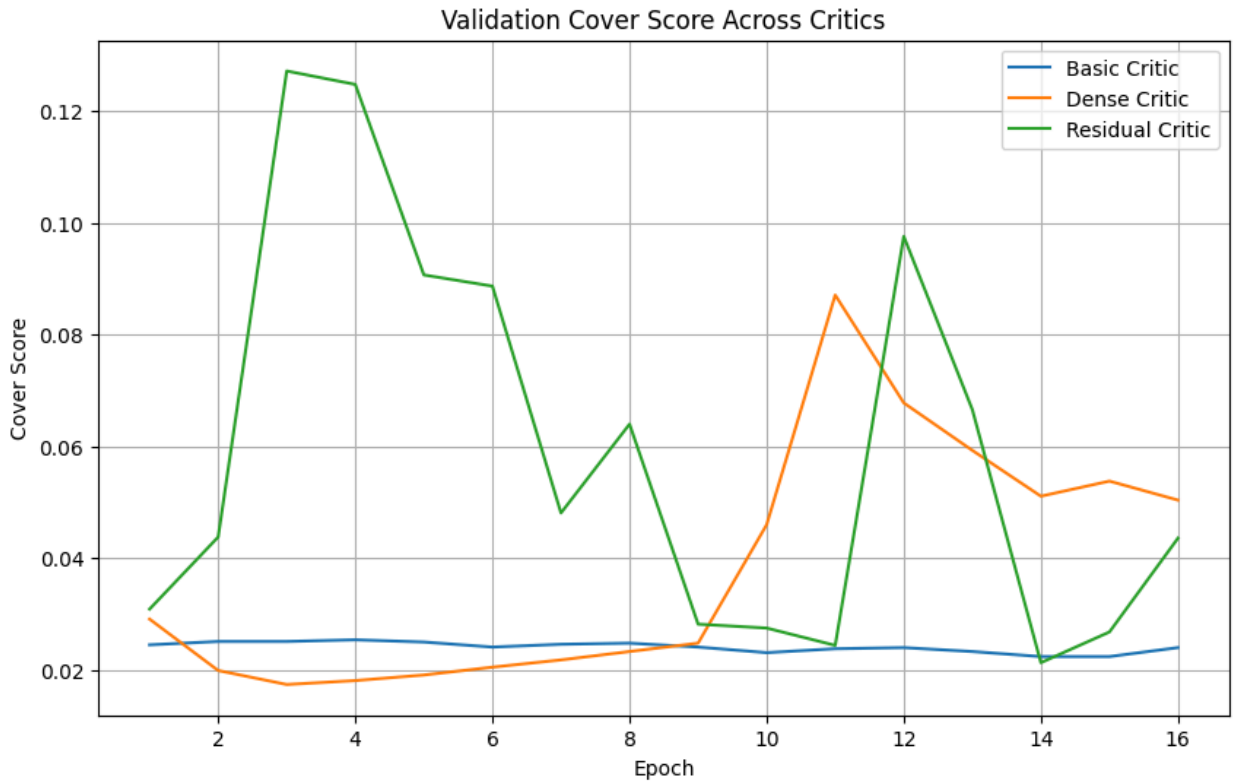

Validation BPP Over Epochs
Val BPP
Epoch
2.2
2.0
1.8
1.6
1.4
1.2
1.0
2
4
6
8
10
12
14
16

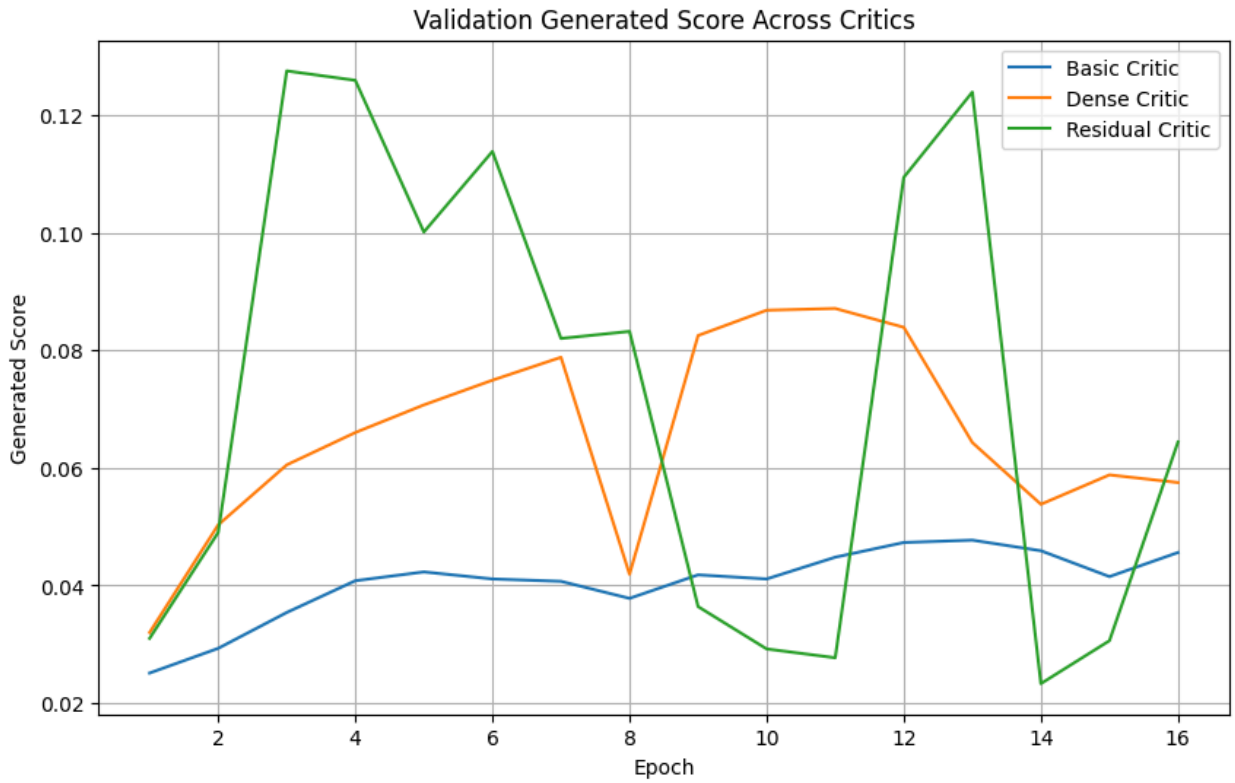
Comparative runs with basic, dense, and residual critic

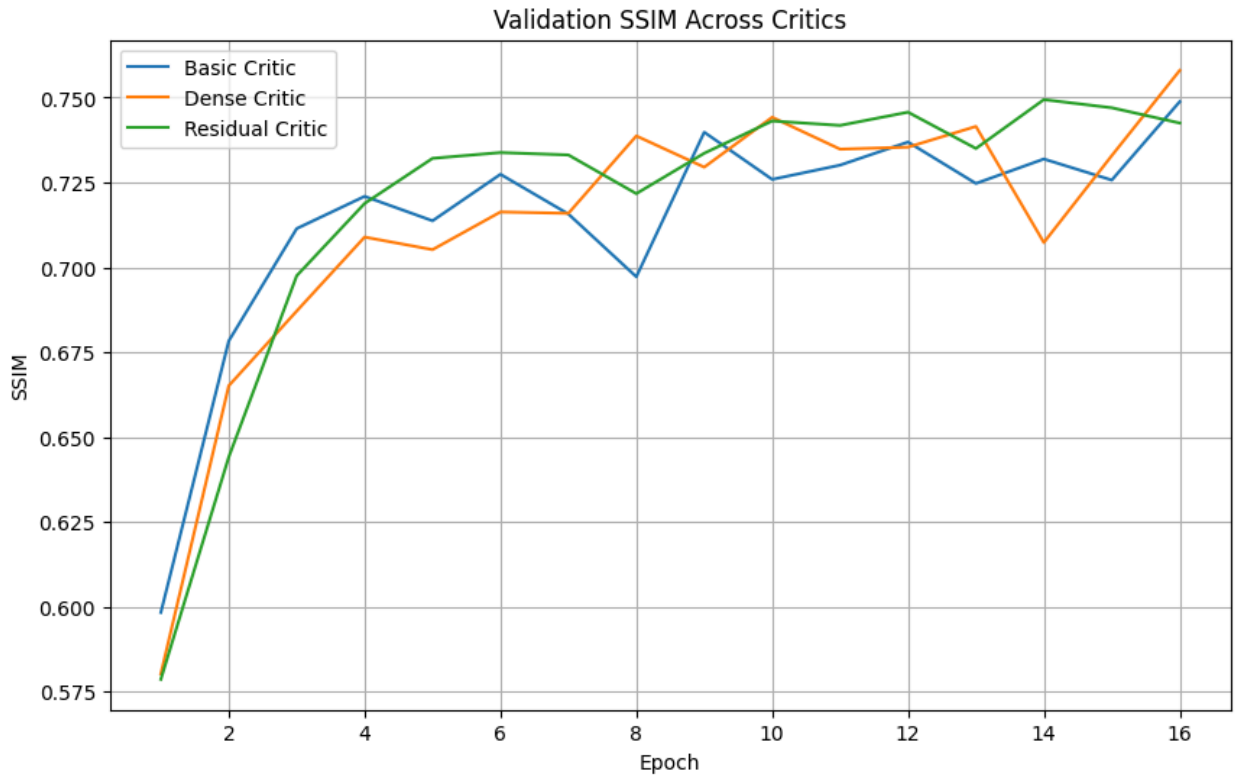


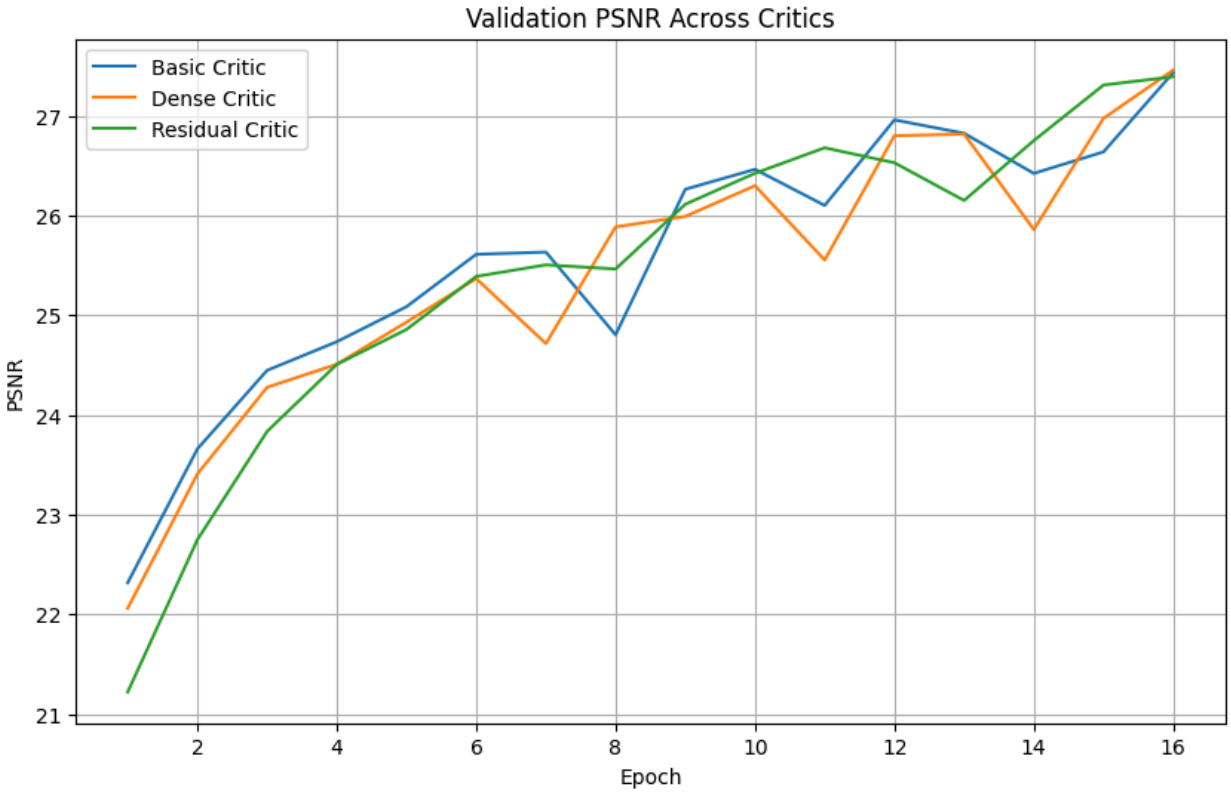


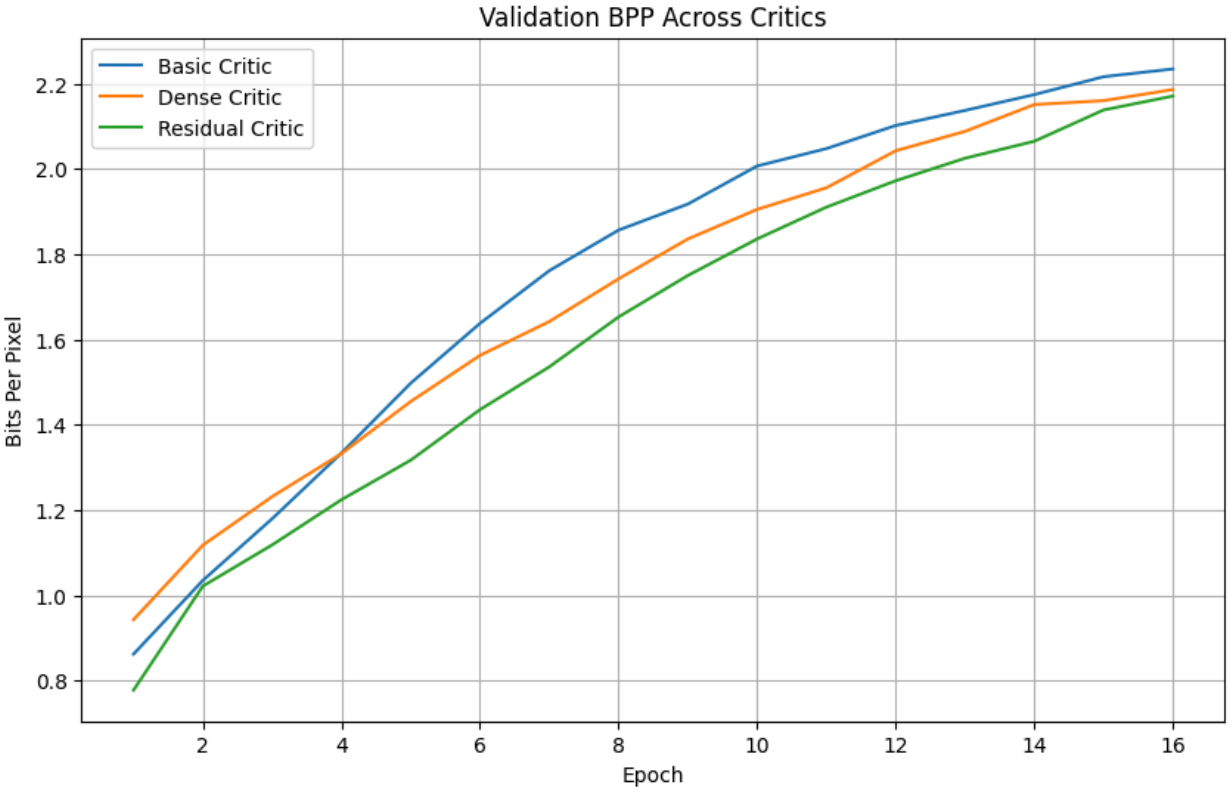

Validation Decoder Accuracy Across Critics
Basic Critic
Dense Critic
Residual Critic
Accuracy
0.85
0.80
0.75
0.70
0.65
2
4
6
8
10
12
14
16
Epoch


Validation Cover Score Across Critics
Basic Critic
Dense Critic
Residual Critic
Cover Score
0.12
0.10
0.08
0.06
0.04
0.02
2
4
6
8
10
12
14
16
Epoch


Validation Generated Score Across Critics
Basic Critic
Dense Critic
Residual Critic
Generated Score
0.12
0.10
0.08
0.06
0.04
0.02
2
4
6
8
10
12
14
16
Epoch


Validation SSIM Across Critics
Basic Critic
Dense Critic
Residual Critic
SSIM
0.750
0.725
0.700
0.675
0.650
0.625
0.600
0.575
2
4
6
8
10
12
14
16
Epoch


Validation PSNR Across Critics
Basic Critic
Dense Critic
Residual Critic
PSNR
Epoch
21
22
23
24
25
26
27
2
4
6
8
10
12
14
16


Validation BPP Across Critics
Basic Critic
Dense Critic
Residual Critic
Bits Per Pixel
Epoch
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2
4
6
8
10
12
14
16