

# Exploiting Inter-sample and Inter-feature Relations in Dataset Distillation

## Supplementary Material

### 1. Analysis of Cluster Constraint Threshold

We show the visualize results on CIFAR10 for different values of  $\beta$  in Section 4.4 and here we show the results on CIFAR100 with IPC=10 as shown in Fig. 1. We conducted

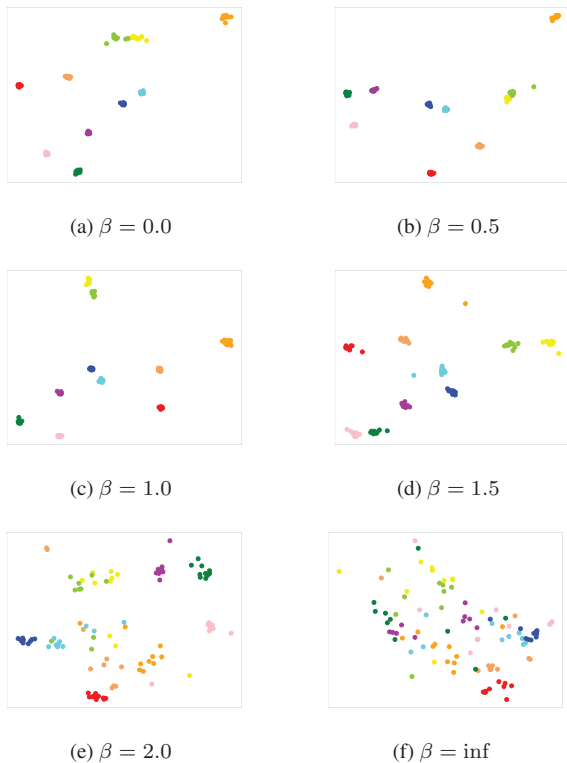


Figure 1. Visualization of different  $\beta$  on CIFAR100 with IPC=10.

experiments with varying  $\beta$  values, ranging from 0.0 to 2.0. To isolate the effects of  $\beta$ , we keep  $\alpha$  constant and do not include our proposed covariance matching constraint. Our visualizations demonstrate that feature distribution per class becomes more dispersed with larger  $\beta$  values and more concentrated with smaller  $\beta$ .

### 2. More Visualization Results of Synthetic Datasets

We show the results of the visualization of the synthetic dataset of DM+ours on IPC = 10 in Section 4.6, and here we show more visualization results.

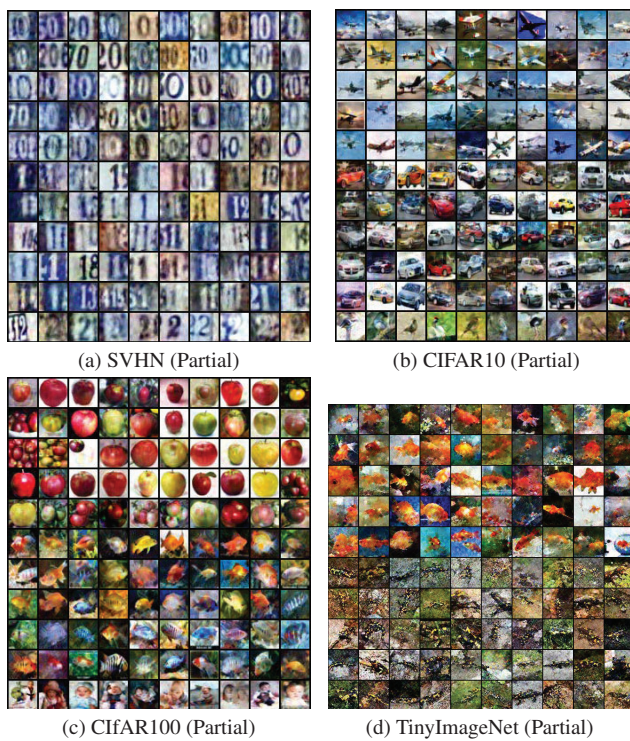
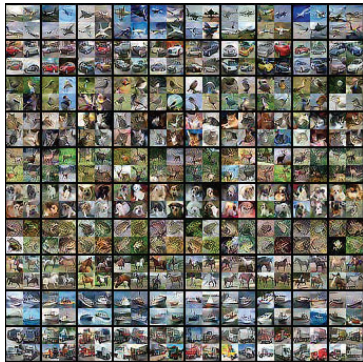


Figure 2. Visualization of synthetic images with IPC=50 (DM+Ours).



(a) SVHN



(b) CIFAR10



(c) Cifar100 (Partial)

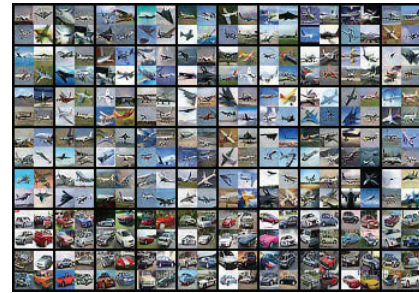


(d) TinyImageNet (Partial)

Figure 3. Visualization of synthetic images with IPC=10 (IDM+Ours).



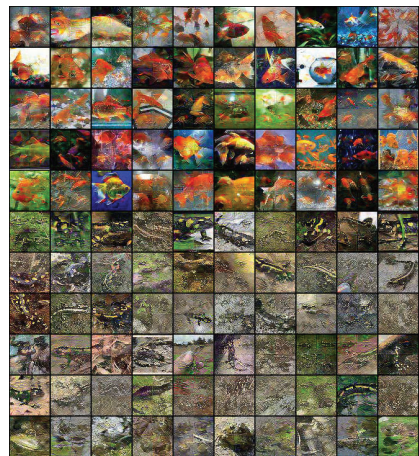
(a) SVHN



(b) CIFAR10



(c) Cifar100 (Partial)



(d) TinyImageNet (Partial)

Figure 4. Visualization of synthetic images with IPC=50 (IDM+Ours).