

	IDBM	DBFS (Ours)
MNIST $\rightarrow$ EMNIST	<b>10.9</b>	13.7
EMNIST $\rightarrow$ MNIST	<b>8.2</b>	9.7

Table 1: Comparison with finite-dimensional baseline on unpaired image transfer (MNIST  $\leftrightarrow$  EMNIST). We compute the FID score. Lower is better.

	NDP	SP-SGM	DBFS (Ours)
Quadratic	$\geq 99.0$	$5.4 \pm 0.7$	<b><math>5.1 \pm 0.4</math></b>
Melbourne	$12.8 \pm 0.4$	<b><math>5.3 \pm 0.7</math></b>	$9.67 \pm 0.45$
Gridwatch	$16.3 \pm 1.8$	$4.7 \pm 0.5$	<b><math>3.9 \pm 0.4</math></b>

Table 2: Comparison with infinite-dimensional baselines on 1D function generation. We compute a Power(%) of a kernel two-sample test. Lower is better.

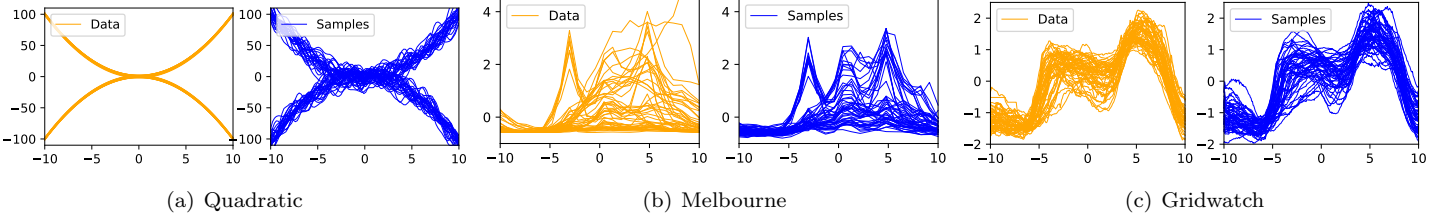


Figure 1: (Left) Real data and (Right) generated samples from our model.

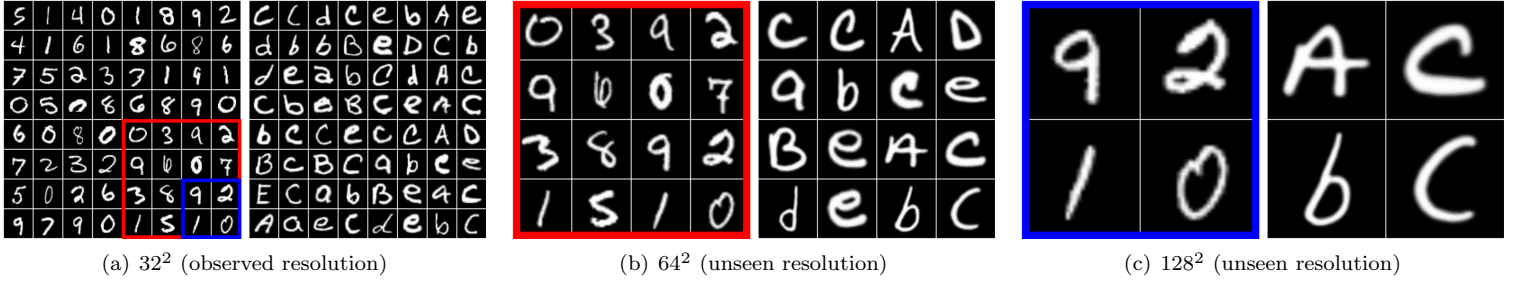


Figure 2: (Left) Real data and (Right) generated samples from our model. For generation at unseen resolutions ( $64^2$  and  $128^2$ ), the images within the red and blue boxes were upsampled (using bi-linear transformation) from the observed resolution ( $32^2$ ).



Figure 3: (Left) Real data and (Right) generated samples from our model. For generation at unseen resolution ( $128^2$ ), the images within the red box were upsampled (using bi-linear transformation) from the observed resolution ( $64^2$ ).



Figure 4: (Left) Real data and (Right) generated samples from our model. For generation at unseen resolution ( $128^2$ ), the images within the red box were upsampled (using bi-linear transformation) from the observed resolution ( $64^2$ ).