

Appendix

A. Insensitivity to Randomness

We train our models three times to account for random weight initialisation or random data augmentation. Table 8 presents the mean and standard deviation of domain adaptation results for Adobe→Slowflow and Adobe+YouTube→Slowflow. Results indicate our models’ insensitivity to randomness, as shown by the margins of improvements in PSNR from 32.84 to 33.05 for Adobe, or from 33.13 to 33.20 for Adobe+YouTube. Table 8 also shows fine-tuning with PS loss alone leads to results that are similar to the Baseline.

B. Interpolation Result vs Intermediate Time

Figure 8 presents mean PSNR score at each of the 41 time-points for Adobe→Sintel domain adaptation using (a) Super SloMo [6] pre-trained with supervision (Baseline), (b) unsupervised fine-tuning with cycle consistency loss alone (CC), and (c) unsupervised fine-tuning with cycle consistency and pseudo supervised losses (CC+PS).

For all models, interpolation accuracy decreases as time-points move away from $t = 0$ or $t = 1$. Compared to the baseline, our CC-based fine-tuning performs better at the end points (close to $t = 0$ or $t = 1$), and worse at midway points. On the other hand, our CC+PS-based unsupervised fine-tuning achieves the best of both CC and Baseline, performing better than both CC and Baseline at all time points.

Adobe→Slowflow				
	Loss	PSNR	SSIM	IE
Baseline	PairedGT	32.84	0.887	6.67
	CC	32.33±0.028	0.886±0.000	6.78±0.021
Proposed	PS	32.88±0.006	0.887±0.000	6.74±0.006
	CC + PS	33.05±0.006	0.890±0.000	6.62±0.000
Adobe+YouTube→Slowflow				
Baseline	PairedGT	33.13	0.889	6.63
	PS	33.14±0.006	0.889±0.000	6.63±0.006
Proposed	CC	32.33±0.028	0.886±0.000	6.78±0.021
Proposed	CC + PS	33.20±0.006	0.891±0.001	6.57±0.010

Table 8. Mean and Standard deviation of PSNR, SSIM, and IE for domain adaptation of upscaling frame rate from 30- to 240-fps for Adobe→or Adobe+YouTube→Slowflow. CC refers to cycle consistency, and PS pseudo supervised loss.

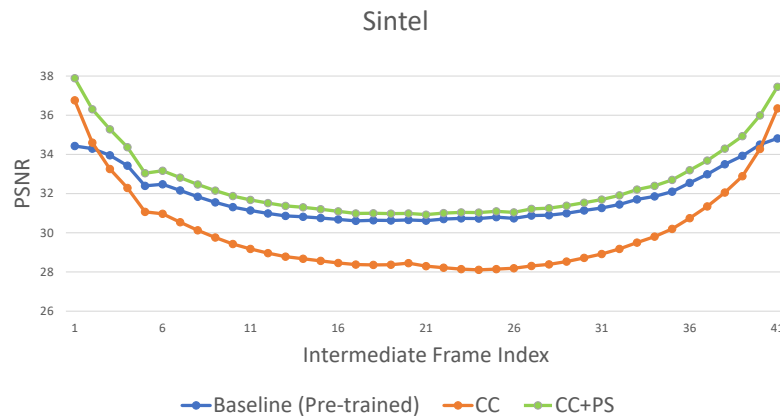


Figure 8. Mean PSNR score at each of the 41 time points for Adobe→Sintel domain adaptation using (a) Super SloMo [6] pre-trained with supervision (Baseline), (b) unsupervised fine-tuning with cycle consistency loss alone (CC), and (c) unsupervised fine-tuning with cycle consistency and pseudo supervised losses (CC+PS).