

A Training parameters

- Batch size: 32
- Number of levels in attention U-Net: 4
- Learning rate: 0.0001
- DDPM training timesteps: 1000
- DDPM inference timesteps: 50
- Model prediction target: $\epsilon(\mathbf{x}_t - \mathbf{x}_0)$

Full training details are provided at:

<https://github.com/matt-baugh/img-cond-diffusion-model-ad>.

B Anomaly map function

Table 1: Comparing detection and localisation results when using different functions to generate the anomaly map by comparing the restored image to the original. Comparing the ensemble performance (Ours_{ens.}) and the average performance of each individual model (Ours_{avg.}). On average Structural Similarity Index Measure (SSIM) gives marginally better results than Mean Absolute Error (MAE).

		BraTS-T2				BraTS-T1				ATLAS				DDR			
		image-level		pixel-level		image-level		pixel-level		image-level		pixel-level		image-level		pixel-level	
Method		AP _i	AUC	AP _p	[Dsc]	AP _i	AUC	AP _p	[Dsc]	AP _i	AUC	AP _p	[Dsc]	AP _i	AUC	AP _p	[Dsc]
Random		0.48	0.50	0.06	0.11	0.48	0.50	0.06	0.11	0.30	0.50	0.02	0.03	0.50	0.50	0.004	0.01
SSIM	Ours _{ens.}	0.89	0.88	0.74	0.69	0.75	0.77	0.30	0.36	0.55	0.75	0.25	0.34	0.73	0.73	0.19	0.27
	Ours _{avg.}	0.88	0.87	0.69	0.66	0.72	0.74	0.26	0.34	0.54	0.74	0.18	0.28	0.71	0.69	0.14	0.24
MAE	Ours _{ens.}	0.90	0.90	0.71	0.68	0.78	0.80	0.30	0.37	0.52	0.77	0.22	0.32	0.67	0.64	0.21	0.31
	Ours _{avg.}	0.89	0.89	0.62	0.64	0.75	0.77	0.24	0.34	0.53	0.76	0.16	0.27	0.65	0.62	0.15	0.26