

	VGG16			VGG19			CNN		
	Hidden layers	Units	Parameter	Hidden layers	Units	Parameter	Hidden layers	Units	Parameter
Generator	Conv_block Max_pooling Conv_block Max_pooling Conv_block Max_pooling Conv_block Max_pooling Conv_block Max_pooling Dense Dense	64×2 128×2 256×3 512×3 512×3 1024 1024	16,295,623	Conv_block Max_pooling Conv_block Max_pooling Conv_block Max_pooling Conv_block Max_pooling Conv_block Max_pooling Dense Dense	64×2 128×2 256×4 512×4 512×4 1024 1024	21,605,319	Conv BatchNorm Conv BatchNorm Conv BatchNorm Dense	256 512 1024 1024	16,451,847
Reconstructor	Dense Dense Dense Reshape Conv_block-T Up_sampling Conv_block-T Up_sampling Conv_block-T Up_sampling Conv_block-T Up_sampling Conv_block-T	1024 1024 1024 512×3 512×3 512×3 256×3 128×2 64×2	10,184,000	Dense Dense Dense Reshape Conv_block-T Up_sampling Conv_block-T Up_sampling Conv_block-T Up_sampling Conv_block-T Up_sampling Conv_block-T	1024 1024 1024 512×4 512×4 512×4 256×4 128×2 64×2	13,281,472	Dense BatchNorm Reshape Conv BatchNorm Conv BatchNorm Conv	1024 1024 1024 512 256	18,048,256
Classifier	Dense BatchNorm Dropout Dense BatchNorm Dropout Dense BatchNorm Dropout Dense BatchNorm Dropout	2048 2048 2048 2048 2048	12,636,168	Dense BatchNorm Dropout Dense BatchNorm Dropout Dense BatchNorm Dropout Dense BatchNorm Dropout	2048 2048 2048 2048 2048	12,636,168	Dense BatchNorm Dropout Dense BatchNorm Dropout Dense BatchNorm Dropout	2048 2048 2048 2048	12,636,168
Discriminator	Conv Dropout Conv Dropout Flatten Dense Dense	128 256 1024 1024	5,084,737	Conv Dropout Conv Dropout Flatten Dense Dense	128 256 1024 1024	5,084,737	Conv Dropout Conv Dropout Flatten Dense Dense	128 256 1024 1024	5,084,737

Shared parameters: optimizer Adam, learning rate 0.0001, 7 dimensions

Hardware: GPU Testla T4 16Gb, CPU Xeon Processors @2.3Ghz

Software: Tensorflow 2.0 beta. The number of trainable parameters are reported by model.summary() from Keras library.