Report

ECE 477 Computer Audition Meiying Chen Homework 5 Nov. 1, 2019

LSTM

Training Code: layers.py, Model_RNN.py

Testing Code: test.py, main.m, bss_eval_sources.m

Files: separate_RNN.py, savedModel_RNN_best.py

Last several epocs(mse loss):

epoc: 95, loss 2.1291737084538909e-07: 100%| 60/60 [01:44<00:00, 1.74s/it]

validation Loss = 2.5829e-07

validation Loss = 2.5808e-07

epoc: 97, loss 2.077462539773478e-07: 100%| 60/60 [01:47<00:00, 1.79s/it]

validation Loss = 2.5790e-07

validation Loss = 2.5598e-07

epoc: 99, loss 2.0908530018459714e-07: 100%| 60/60 [01:45<00:00, 1.76s/it]

SNR:

# Test	51	52	53	55	56	59	60	63	65	66	
SDR	1.6967	2.9156	-1.0238	1.5086	2.1352	2.3980	2.4011	2.6613	1.0961	4.9782	
Ave	2.0767										

FCNN

Training Code: Model_fcnn.py

Testing Code: test.py, main.m, bss_eval_sources.m

Files: separate_fcnn.py, savedModel_fcnn_best.py

SDR:

# Test	51	52	53	55	56	59	60	63	65	66
SDR	1.5929	-1.5487	0.9158	-1.3479	3.8859	5.2558	3.4934	-6.7345	3.1607	3.6823
Ave	1.2356									