

Adjustments:

batch_size = 32

LR patience = 7, factor = 0.1

ES patience = 10

SEWA 1 sec (BEST ONE):

Epoch 1, Val Loss: 0.1266

Epoch 2, Val Loss: 0.1270

Epoch 3, Val Loss: 0.1267

Epoch 4, Val Loss: 0.1267

Epoch 5, Val Loss: 0.1258

Epoch 6, Val Loss: 0.1260

Epoch 7, Val Loss: 0.1265

Epoch 8, Val Loss: 0.1253

Epoch 9, Val Loss: 0.1251

Epoch 10, Val Loss: 0.1285

Epoch 11, Val Loss: 0.1255

Epoch 12, Val Loss: 0.1279

Epoch 13, Val Loss: 0.1276

Epoch 14, Val Loss: 0.1271

Epoch 15, Val Loss: 0.1254

Epoch 16, Val Loss: 0.1256

Epoch 17, Val Loss: 0.1254

Epoch 00017: reducing learning rate of group 0 to 1.0000e-04.

Epoch 18, Val Loss: 0.1252

Epoch 19, Val Loss: 0.1255

Early stopping triggered

Training stopped after 9 epochs

Test MAE Valence: 0.1326, **RMSE Valence: 0.1669**

Test MAE Arousal: 0.1339, **RMSE Arousal: 0.1796**

SEWA 2 sec:

Epoch 1, Val Loss: 0.1258

Epoch 2, Val Loss: 0.1277

Epoch 3, Val Loss: 0.1261

Epoch 4, Val Loss: 0.1252

Epoch 5, Val Loss: 0.1254

Epoch 6, Val Loss: 0.1264

Epoch 7, Val Loss: 0.1257

Epoch 8, Val Loss: 0.1262

Epoch 9, Val Loss: 0.1248

Epoch 10, Val Loss: 0.1252

Epoch 11, Val Loss: 0.1250

Epoch 12, Val Loss: 0.1252
Epoch 13, Val Loss: 0.1265
Epoch 14, Val Loss: 0.1271
Epoch 15, Val Loss: 0.1260
Epoch 16, Val Loss: 0.1263
Epoch 17, Val Loss: 0.1273
Epoch 00017: reducing learning rate of group 0 to 1.0000e-04.
Epoch 18, Val Loss: 0.1252
Epoch 19, Val Loss: 0.1249
Early stopping triggered
Training stopped after 9 epochs
Test MAE Valence: 0.1347, **RMSE Valence: 0.1698**
Test MAE Arousal: 0.1376, **RMSE Arousal: 0.1843**

SEWA 3 sec:

Epoch 1, Val Loss: 0.1257
Epoch 2, Val Loss: 0.1268
Epoch 3, Val Loss: 0.1255
Epoch 4, Val Loss: 0.1247
Epoch 5, Val Loss: 0.1241
Epoch 6, Val Loss: 0.1265
Epoch 7, Val Loss: 0.1248
Epoch 8, Val Loss: 0.1247
Epoch 9, Val Loss: 0.1247
Epoch 10, Val Loss: 0.1249
Epoch 11, Val Loss: 0.1275
Epoch 12, Val Loss: 0.1274
Epoch 13, Val Loss: 0.1253
Epoch 00013: reducing learning rate of group 0 to 1.0000e-04.
Epoch 14, Val Loss: 0.1251
Epoch 15, Val Loss: 0.1248
Early stopping triggered
Training stopped after 5 epochs
Test MAE Valence: 0.1325, **RMSE Valence: 0.1665**
Test MAE Arousal: 0.1379, **RMSE Arousal: 0.1863**

SEWA 4 sec:

Epoch 1, Val Loss: 0.1285
Epoch 2, Val Loss: 0.1259
Epoch 3, Val Loss: 0.1262
Epoch 4, Val Loss: 0.1256
Epoch 5, Val Loss: 0.1264
Epoch 6, Val Loss: 0.1257
Epoch 7, Val Loss: 0.1275

Epoch 8, Val Loss: 0.1249
Epoch 9, Val Loss: 0.1266
Epoch 10, Val Loss: 0.1258
Epoch 11, Val Loss: 0.1260
Epoch 12, Val Loss: 0.1260
Epoch 13, Val Loss: 0.1270
Epoch 14, Val Loss: 0.1250
Epoch 15, Val Loss: 0.1242
Epoch 16, Val Loss: 0.1260
Epoch 17, Val Loss: 0.1245
Epoch 18, Val Loss: 0.1244
Epoch 19, Val Loss: 0.1259
Epoch 20, Val Loss: 0.1249
Epoch 21, Val Loss: 0.1250
Epoch 22, Val Loss: 0.1256
Epoch 23, Val Loss: 0.1286
Epoch 00023: reducing learning rate of group 0 to 1.0000e-04.
Epoch 24, Val Loss: 0.1249
Epoch 25, Val Loss: 0.1252
Early stopping triggered
Training stopped after 15 epochs
Test MAE Valence: 0.1338, **RMSE Valence: 0.1672**
Test MAE Arousal: 0.1339, **RMSE Arousal: 0.1810**

Decision Tree Algorithm:

1 sec:

Arousal - Dev RMSE: 0.1973916847658415 Test RMSE: 0.24247219920806407
Valence - Dev RMSE: 0.21595636185233033 Test RMSE: 0.23319716413073385

2 sec:

Arousal - Dev RMSE: 0.19844405179331806 Test RMSE: 0.2416438084199608
Valence - Dev RMSE: 0.2526523052868014 Test RMSE: 0.2273068760610807

3 sec (BEST):

Arousal - Dev RMSE: 0.19954608690173675 **Test RMSE: 0.229942982178242**
Valence - Dev RMSE: 0.19275209310988592 **Test RMSE: 0.2130777565836836**
RMSE quadriert = MSE

4 sec:

Arousal - Dev RMSE: 0.17957207692538585 Test RMSE: 0.22671376994901732
Valence - Dev RMSE: 0.19899053427001887 Test RMSE: 0.22913537936780798

SVR missing