AFEW-VA Data Base:

Neural Network

Validation RMSE: **0.1294**
Early stopping at epoch 12.

Best (at epoch 2):
RMSE Arousal: 0.1087
MAE Arousal: **0.0811**

RMSE Valence: 0.1217
MAE Valence: **0.0907**

Test:
MAE Valence: **0.0760**
RMSE Valence: 0.0987

MAE Arousal: **0.0898**
RMSE Arousal: 0.1310

Bayessian Ridge

	dev data	test data
valence	mean² error: 0.013 R²: **0.119**	mean² error: 0.009 R²: **0.089** **RMSE=0.09**
arousal	mean² error: 0.017 R²: **0.128** **rmse= root MSE**	mean² error: 0.019 R²: **0.139** **RMSE=0.13**

Decision Tree

	dev data	test data
valence	mean² error: 0.027 R²: **0.162**	mean² error: 0.023 R²: **0.154** **RMSE=0.15**
arousal	mean² error: 0.025 R²: **0.160**	mean² error: 0.039 R²: **0.198** **RMSE=0.19**

SVR

	dev data	test data
valence	mean² error: 0.011 R²: **0.107**	mean² error: 0.009 R²: **0.091** **RMSE=0.09**
arousal	mean² error: 0.009 R²: **0.099**	mean² error: 0.017 R²: **0.125** **RMSE=0.13**

все примерно одинаково сработали по тестовым данным, decision tree хуже всего
нейронку надо тоже в таблицу переделать
valence : bayessian
arousal: SVR
todo: summary what works best and where
сравнить модели дев и тест и сказать что лучше работает (может они одинаково работают)

Baseline AFEW-VA:

Algorithm	MSE (V)	RMSE (V)	MSE (A)	RMSE (A)
Bayesian Ridge	0.009	0.09	0.019	0.13
SVR	0.009	0.09	0.017	0.13
Decision Tree	0.023	0.15	0.039	0.19

Table: Results of the used machine learning algorithms on AFEW-VA.

Baseline with AFEW-VA	MAE (V)	RMSE (V)	MAE (A)	RMSE (A)
Feed Forward Neural Network	0.07	0.09	0.08	0.13

Baseline SEWA:

Algorithm	MSE (V)	RMSE (V)	MSE (A)	RMSE (A)
Bayesian Ridge	0.01	0.10	0.01	0.10
SVR	0.01	0.11	0.01	0.10
Decision Tree	0.03	0.17	0.02	0.14

Table: Results of the used machine learning algorithms on SEWA.

Baseline with SEWA	MAE (V)	RMSE (V)	MAE (A)	RMSE (A)
Feed Forward Neural Network	0.09	0.12	0.08	0.10

SEWA Data Base:

Neural Network

Validation RMSE: **0.0907**
Early stopping at epoch 11.

<u>Best (at epoch 1):</u>
RMSE Arousal: 0.0808
MAE Arousal: **0.0589**

RMSE Valence: 0.0960
MAE Valence: **0.0678**

<u>Test:</u>
MAE Valence: 0.0929
RMSE Valence: **0.1201**

MAE Arousal: 0.0846
RMSE Arousal: **0.1084**

Bayessian Ridge

	<u>dev data</u>	<u>test data</u>
valence	mean² error: 0.0001 R²: **0.010**	mean² error: 0.0001 R²: **0.012** **RMSE=0.01**
arousal	mean² error: 6.660 R²: **0.009**	mean² error: 0.0001 R²: **0.010** **RMSE=0.01**

Decision Tree

	<u>dev data</u>	<u>test data</u>
valence	mean² error: 0.0001 R²: **0.014**	mean² error: 0.0003 R²: **0.018** **RMSE=0.01**
arousal	mean² error: 0.0001 R²: **0.012**	mean² error: 0.0002 R²: **0.016** **RMSE=0.01**

SVR

	<u>dev data</u>	<u>test data</u>
valence	mean² error: 0.009 R²: **0.091**	mean² error: 0.013 R²: **0.115** **RMSE=0.11**
arousal	mean² error: 0.006 R²: **0.078**	mean² error: 0.010 R²: **0.101** **RMSE=0.10**