ML Experiments

Allgemein

• Anlage: WR 3 Diehl

Gruppe: südwestl-Eingänge ML Typ: Neuronales Netz

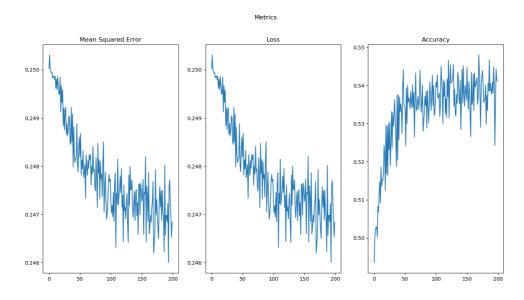
Daten: 10000 Werte (50% defekte Strings)

• Train-Test-Ratio: 30%

Baseline

Aktivierung: reluOptimierer: adam

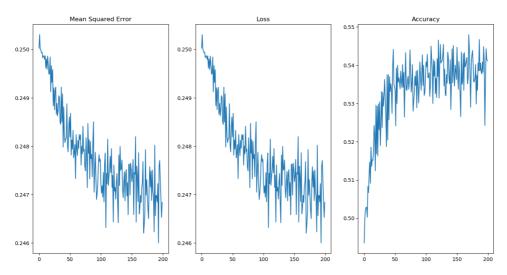
• Netzstruktur: 8, 16, 5, 1(sigmoid)



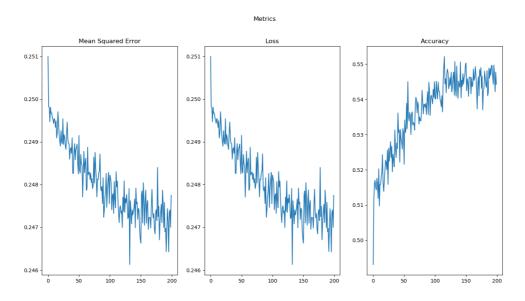
Optimierer

Adam

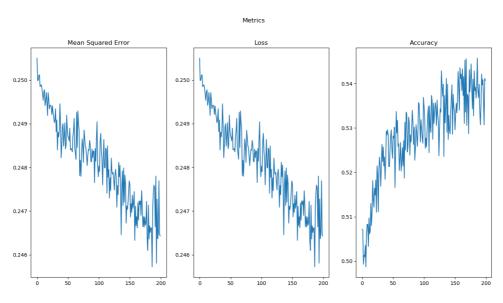


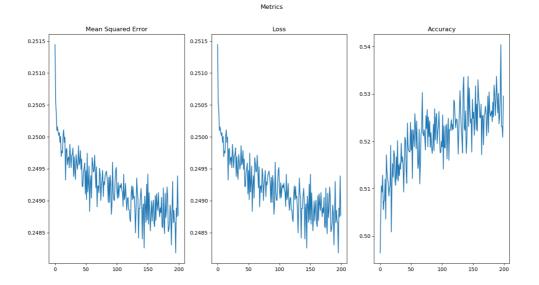


Adadelta



RMSprop



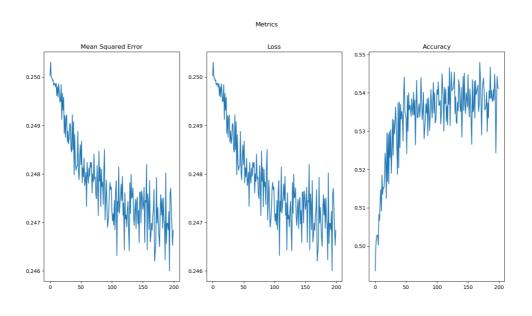


Evaluierung

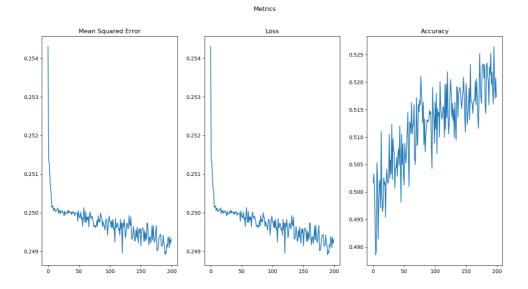
Optimierer	Accuracy	Mean squared error
adam	0.5337	0.2482
adadelta	0.5370	0.2470
RMSprop	0.5423	0.2474
sgd	0.5270	0.2486

Aktivierung

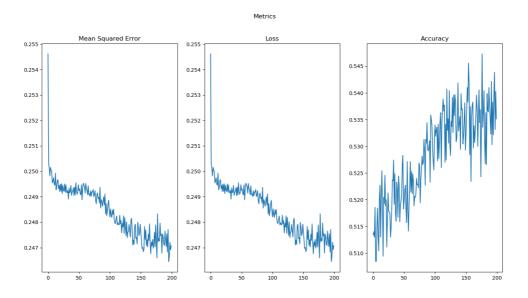
Relu



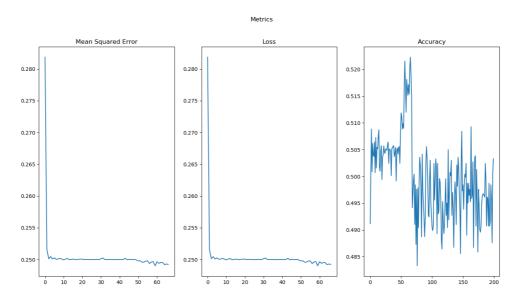
Sigmoid



Tanh



Exponential

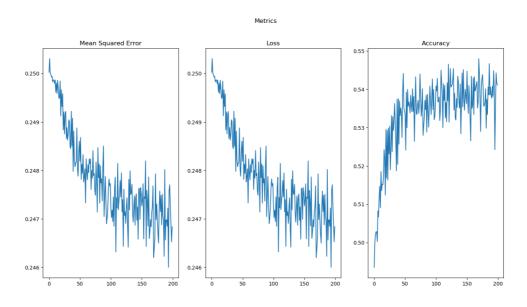


Evaluierung

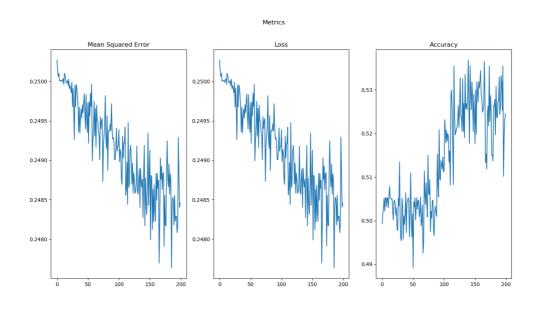
Aktivierung	Accuracy	Mean squared error
Relu	0.5337	0.2482
Sigmoid	0.5133	0.2494
Tanh	0.5157	0.2485
Exponential	0.5123	0.4877

Netzstruktur

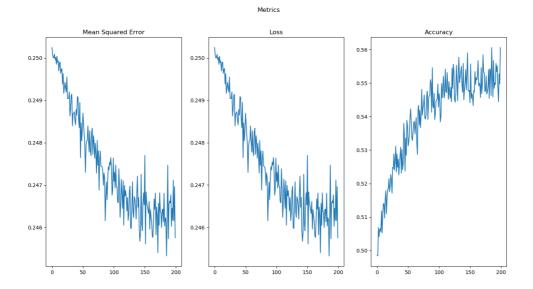
8-16-5-1



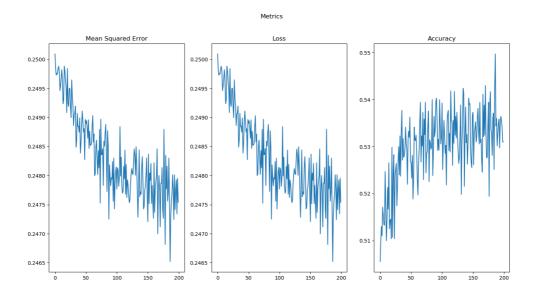
8-16-8-4-2-1



16-32-16-8-4-1



8-10-3-1

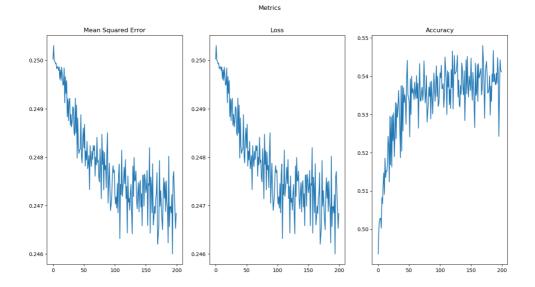


Evaluierung

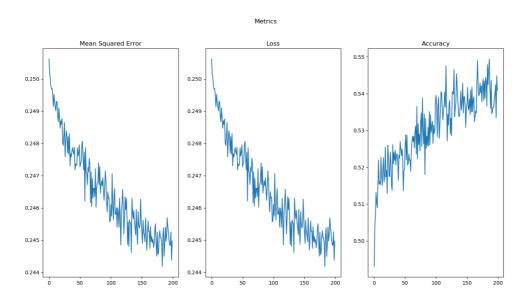
Netz	Accuracy	Mean squared error
8-16-5-1	0.5337	0.2482
8-16-8-4-2-1	0.5503	0.2490
16-32-16-8-4-1	0.5350	0.2483
8-10-3-1	0.5340	0.2479

Zeitraum

Ganzer Tag



12:00 bis 15:00



Evaluierung

Zeitraum	Accuracy	Mean squared error
ganzer Tag	0.5337	0.2482
13:00 - 15:00	0.5317	0.2459