Learning Loop in NN

Input **X**

Model
(NN Architecture)

- Layer: Dense, Dropout, BatchNormalization, …
- Activation function: sigmoid, relu, elu, …
- Initializer: glorot_normal, he_normal, …
- batch size, epochs, ...

Weights

update

Predictions
Y′

True targets
Y

Optimizer

Loss functions   + regularization

- L1 regularizer
- L2 regularizer
- …

minimize

Loss score

- mean_squared_error
- binary_crossentropy
- categorical_crossentropy
- …

- SGD
- Adagrad
- RMSProp
- Adam
- …