Semantic Computing

Tutorial 7

Summer Semester 2018

Exercise 1

Train your own neural network

a) Download the file "tutorial7.py" from `http://github.com/dgromann/SemanticComputing/`

b) Take a look at the provided data and the already provided data analyses. Try to answer the following questions.

- Which kind of machine learning task is this?

- How many features do we have in this task?

- What can you learn from a correlation matrix?

c) Specify a model with one input layer, one hidden layer, and one output layer.

d) Compile and fit the model that you have specified.

e) Evaluate the model using the provided evaluation functions. What can you tell about the results by looking at a covariance matrix?

f) Add another hidden layer to the model and train and evaluate again.

g) Try an evaluation with more epochs.