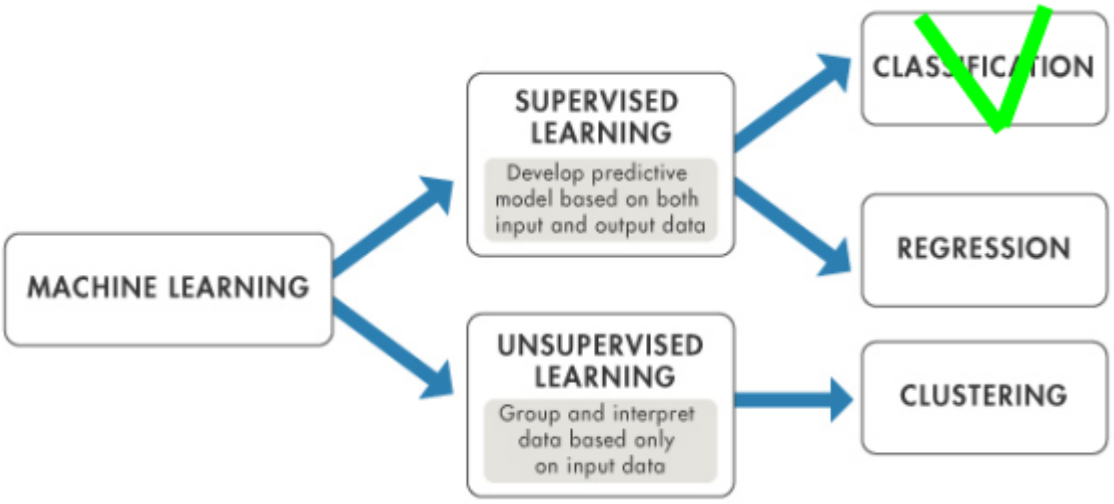
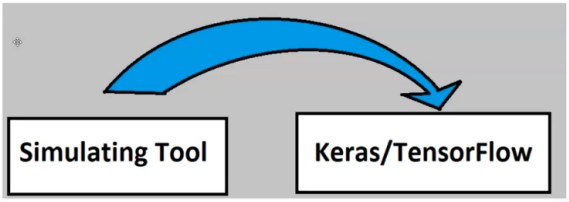
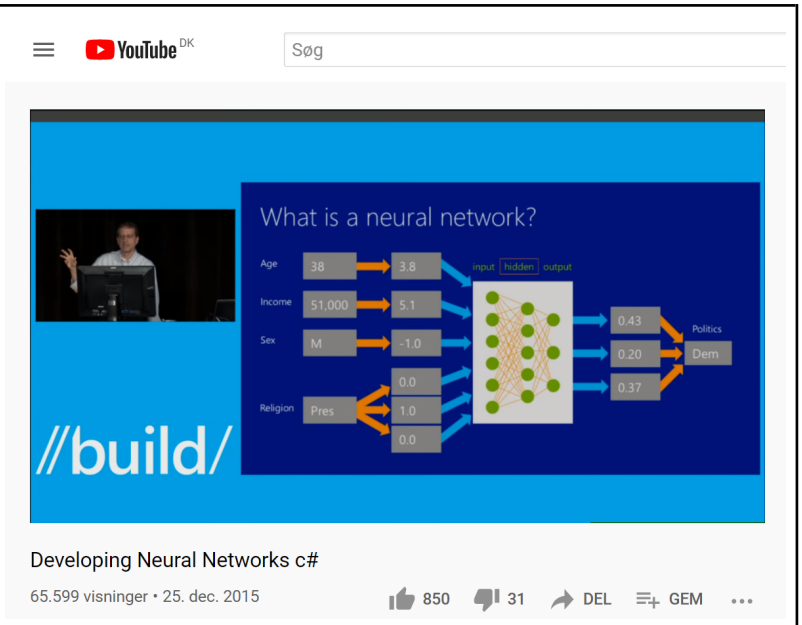
[2022.02] Python Keras exercise (Classification) (James McCaffrey)



Video Get started with Machine Learning i Python. See Video *"From DNN Simulator til Keras"*	

Video

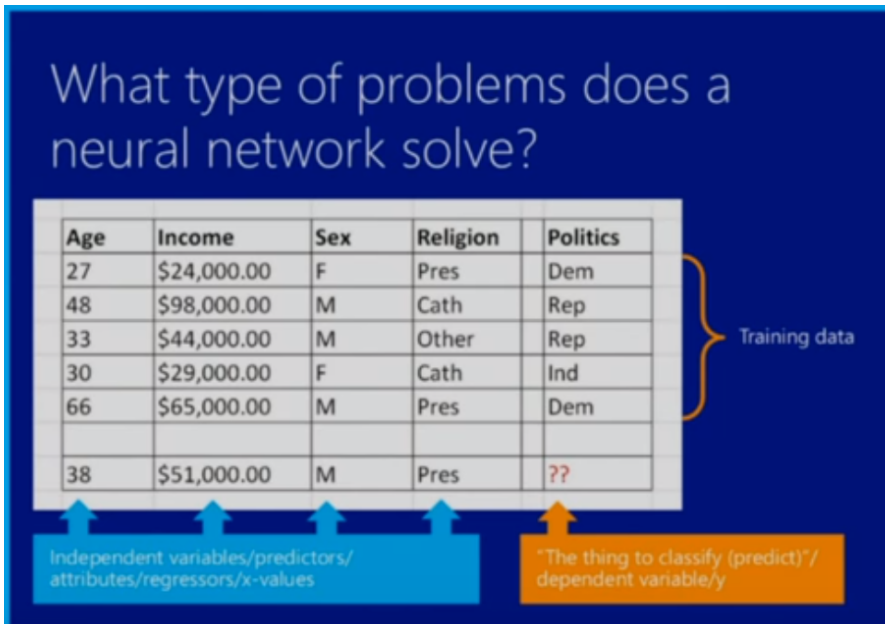
If you have not already seen it, the watch the first 35 min. from this video. This will help you understand the problem.



DATA

Same data as in previous exercise.

Use only the first 5 rows for training.
Use the last row for testing.



Exercise 1

Data Preparation

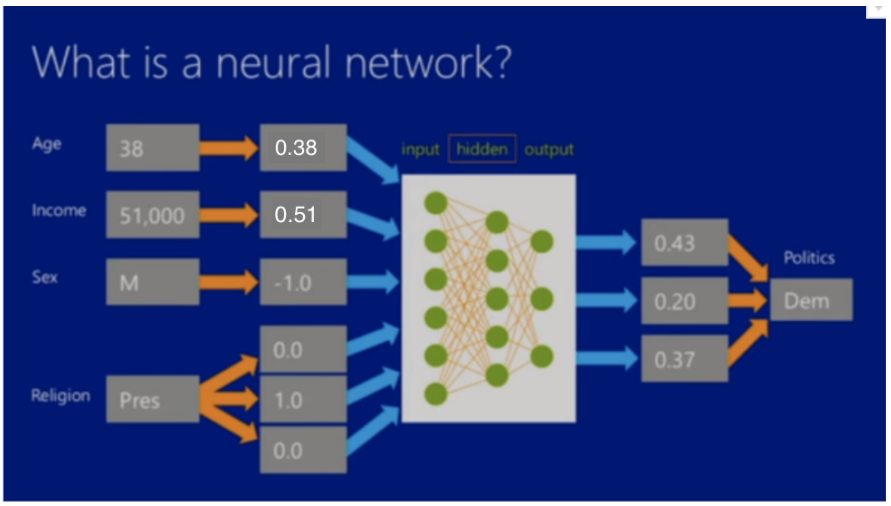
You have to convert the raw data to numbers between -1.0 and 1.0.

Note that the Sex category has been changed to -1.0 and 1.0 for Male, Female respectively.

Also the Religion category has been changed to three subcategories (Dem, Rep, Ind)

As you can see, the whole dataset is now more similar in range.

Save your prepared data in a ***NumPy array***.



Exercise 2

Make a Keras model:
And train with the data from the NumPy array above.

Make predictions:
When training is done, see if your model can predict "Democrats" just as the image on the right does.