



Question 1

What back-propagation is usually used for in neural networks?

Correct answer:

- To calculate gradient of the loss function with respect to the parameters of the network

Incorrect answers:

- To propagate signal through network from input to output only. This is called "forward pass"
- Make several random perturbations of parameters and go back to the best one. This one doesn't involve gradients and have nothing to do with back-propagation
- Select gradient update direction by flipping a coin. In back-propagation gradients are calculated exactly, not random

Question 2

Suppose we've trained a RandomForest model with 100 trees. Consider two cases:

1. We drop the first tree in the model
2. We drop the last tree in the model

We then compare models performance *on the train set*. Select the right answer.

Correct answers:

- In the case1 performance **will be roughly the same** as in the case2. In RandomForest model we average 100 similar performing trees trained