## Congratulations! You passed!

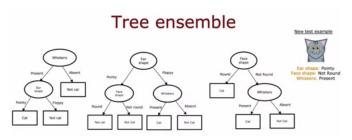
Grade received 100%

Latest Submission Grade 100% To pass 80% or higher

Go to next item

1/1 point

1.



 $For the \, random \, forest, how \, do \, you \, build \, each \, individual \, tree \, so \, that \, they \, are \, not \, all \, identical \, to \, each \, other?$ 

- Train the algorithm multiple times on the same training set. This will naturally result in different trees.
- O Sample the training data without replacement
- If you are training B trees, train each one on 1/B of the training set, so each tree is trained on a distinct set of examples.
- Sample the training data with replacement

## **⊘** Correct

Correct. You can generate a training set that is unique for each individual tree by sampling the training data with replacement.

2.

1/1 point

You are choosing between a decision tree and a neural network for a classification task where the input x is a 100x100 resolution image. Which would you choose?

- A neural network, because the input is unstructured data and neural networks typically work better with unstructured data.
- A decision tree, because the input is unstructured and decision trees typically work better with unstructured data.
- A neural network, because the input is structured data and neural networks typically work better with structured data.
- A decision tree, because the input is structured data and decision trees typically work better with structured data.

$\odot$	Correc
	Yes!

What does sampling with replacement refer to?

- Drawing a sequence of examples where, when picking the next example, first replacing all previously drawn examples into the set we are picking from.
- O It refers to using a new sample of data that we use to permanently overwrite (that is, to replace) the original data.
- $\ \ \bigcirc$  . It refers to a process of making an identical copy of the training set.
- O Drawing a sequence of examples where, when picking the next example, first remove all previously drawn examples from the set we are picking from.



1/1 point