

Supervised Learning Basics

TOTAL POINTS 3

1. What is supervised learning doing?

1 / 1 point

- ☒ Finding the hypothesis in a specific class of hypotheses that best labels given data.
- ☐ Finding the hypothesis in a class of hypotheses that best clusters given data.
- ☐ Finding the best classification function from the set of all possible classifiers.
- ☐ Filtering spam
- ☐ Finding the best linear function in the set of all possible linear functions.
- ☐ Finding the best hypothesis from the set of all possible hypotheses that label given data.



Correct

Correct! Supervised learning is about finding the best mapping from input to "correct" labels, and learning algorithms find the best hypothesis within their class.

2. How do you build and use classifiers in scikit-learn?

1 / 1 point

- ☐ For the learning phase you use "predict", for the operational phase you use "fit".
- ☐ For the learning phase you use "label" and for the operational phase you use "classify".
- ☒ For the learning phase, you use "fit" and for the operational phase you use "predict".
- ☐ Pass the training data to the classifier constructor and then use "predict".
- ☐ For the learning phase you use "classify" and for the operational phase you use "label".



Correct

Correct! The method "fit" is what finds the appropriate hypothesis and "predict" is what uses it to correctly label data.

3. What is a hypothesis space?

1 / 1 point

- ☒ A set of hypotheses that might answer a given question.
- ☐ All hypothesis that are supported by the evidence.
- ☐ The offset typesetters use for an M-dash
- ☐ Another name for the scientific method.
- ☐ A set of hypothesis that might answer any question.



Correct

Correct! We talk about "hypothesis space" when we're describing, in abstract, all the possible functions considered by a learning algorithm.