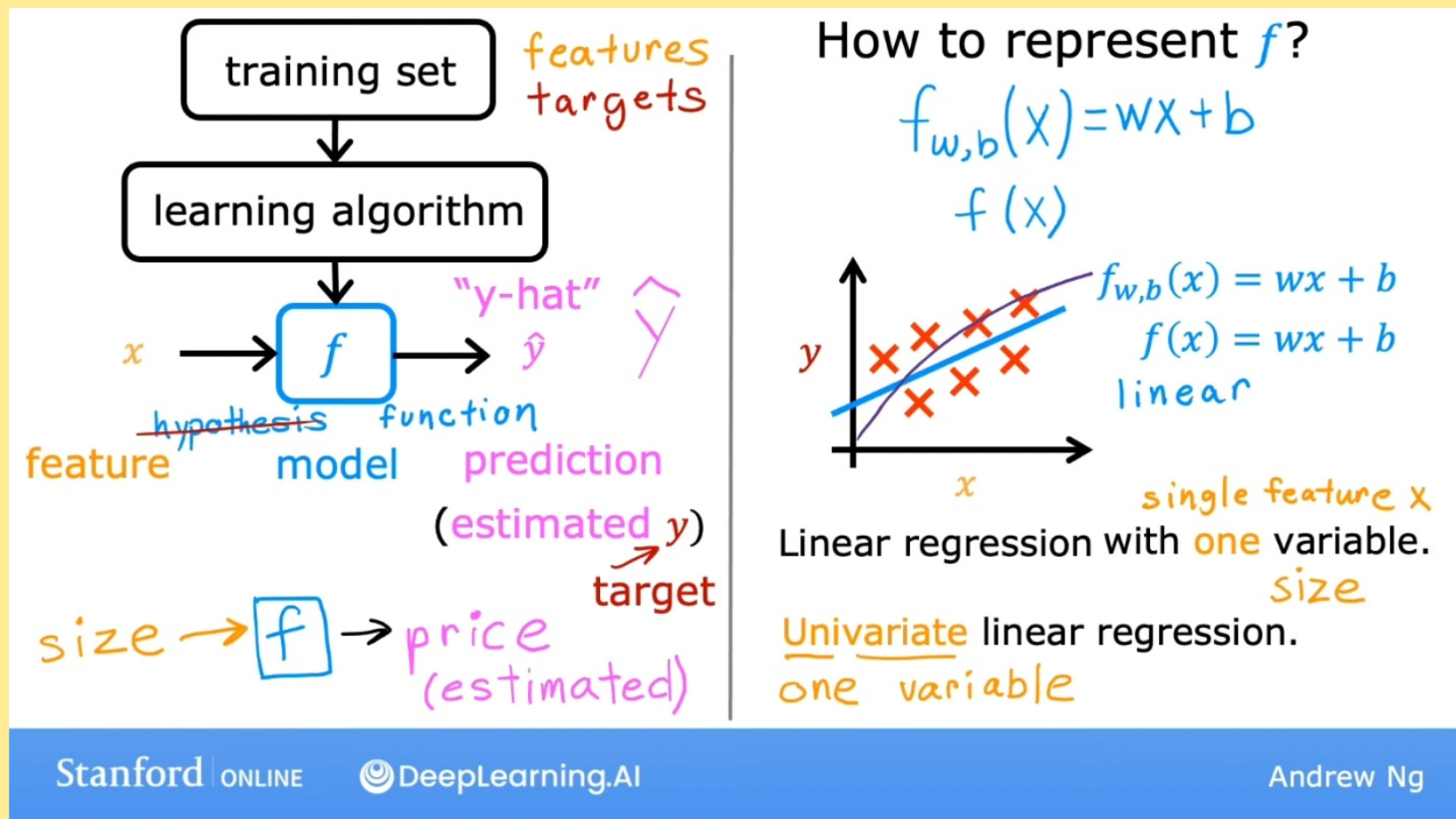→ At first we train a model

→ We treat the model as function

→ Then for the every input, the function give us a prediction

How to represent f?

$$f_{w,b}(x) = wx + b$$

$$f(x)$$

$$f_{w,b}(x) = wx + b$$
$$f(x) = wx + b$$
linear

training set — features targets

learning algorithm

$x \rightarrow f \rightarrow \hat{y}$ "y-hat"

hypothesis function
feature model prediction
(estimated y)

size $\rightarrow f \rightarrow$ price (estimated)

target

single feature x

Linear regression with **one** variable.

size

Univariate linear regression.
one variable

Stanford ONLINE   DeepLearning.AI   Andrew Ng

→ For the linear regression the function is:

$$f(x) = wx + b$$

W and b are constant here

→ since it has only one variable that's why it is Univariate.