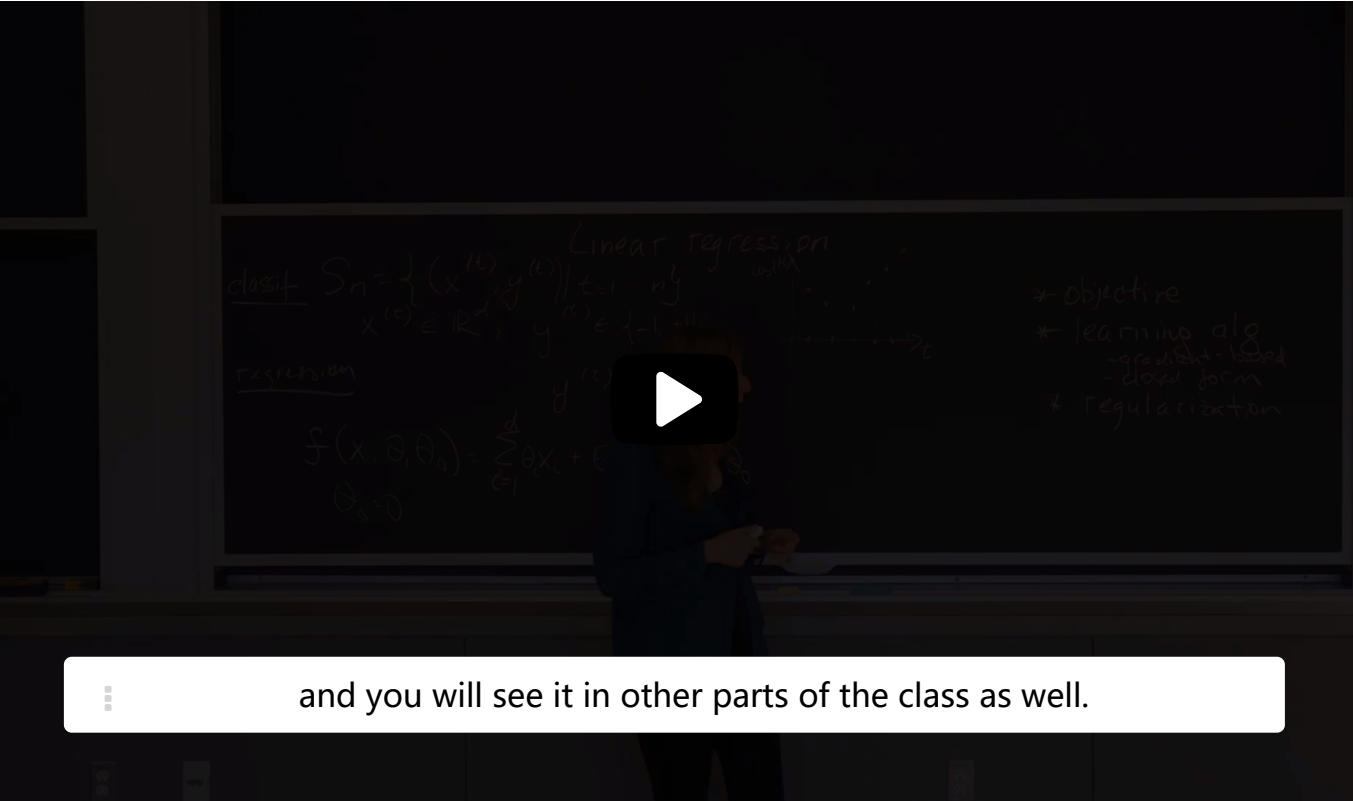


3. Introduction

Introduction; Lecture Overview



▶ 11:22 / 11:22

▶ 1.0x

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you are again bringing yourself to the bad spot.

So there is a mechanism that would enable us to do better generalization to be more robust when we don't have enough training data or when the data is noisy.

So we'll introduce this regularization in the context of linear regression, and you will see it in other parts of the class as well.

End of transcript. Skip to the start.

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Introduction Exercise

1/1 point (graded)  
Which of the following is true about linear regression? Choose all those apply.

- ☒ The observed value,  $y$ , is a real number. i.e.  $y \in \mathbb{R}$  ✓
- ☒ The predictor  $f$  is a linear function of the feature vectors. i.e.  $f(x) = \sum_{i=1}^d \theta_i x_i + \theta_0$  ✓
- ☐ The observed value  $y$  is a discrete integer.
- ☐ The observed value  $y$  is a category, as in classification.



Solution:

By definition, in regression, the observed value  $y$  is a real number(continuous), unlike  $y$  is discrete in classification. The predictor  $f$ , which tries to emulate/predict  $y$  is defined as  $f(x) = \sum_{i=1}^d \theta_i x_i + \theta_0$ .

Submit

You have used 1 of 3 attempts