OVER-FITTING

- Basic concepts
- Definition.
- How to limit overfitting

OVER-FITTING

Basic Concepts

Generalization of Machine Learning:

- Try to predict the future event (output) Y from the present events (input) X.

- General model : $Y = f(X)$.

- Need to find function f from training data set Y and X, respectively.

OVER-FITTING

Basic Concepts

Three posibilities of function
f:

- Good fit
- Under-fitting
- Over-fitting

OVER-FITTING

Basic Concepts
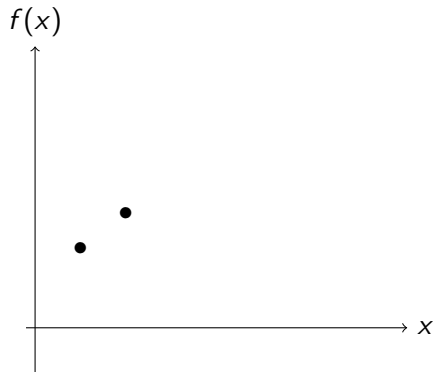
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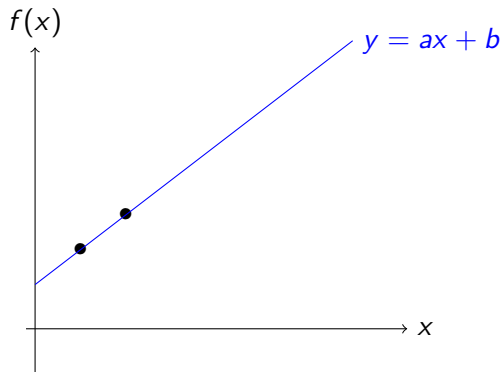- Over-fitting : Studying
  likes a parrot

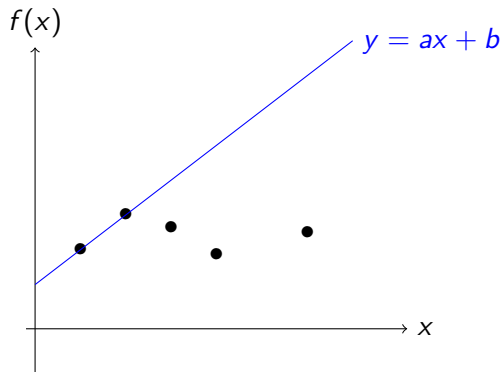# OVER-FITTING

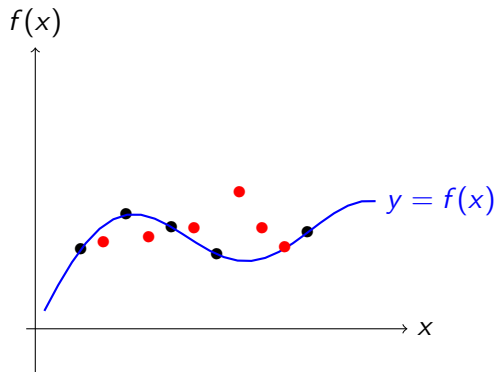# OVER-FITTING

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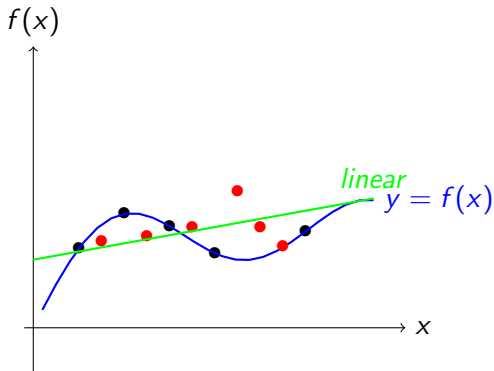
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Apply regularization add a cost to the loss function for large weights.

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Cross-validation

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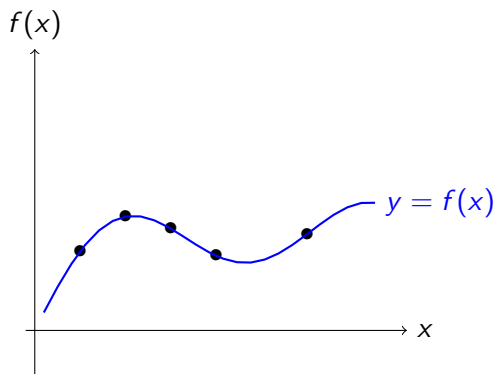**Add dropout layers** Randomly remove certain features by setting them to zero.

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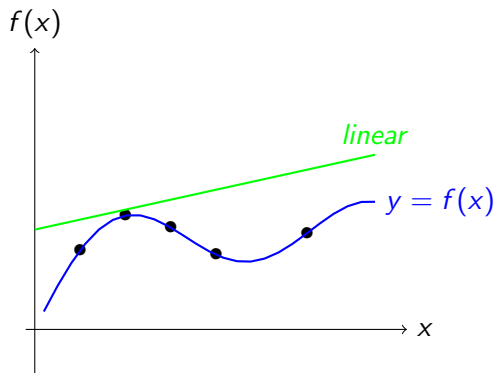**Add dropout layers** Randomly remove certain features by setting them to zero.

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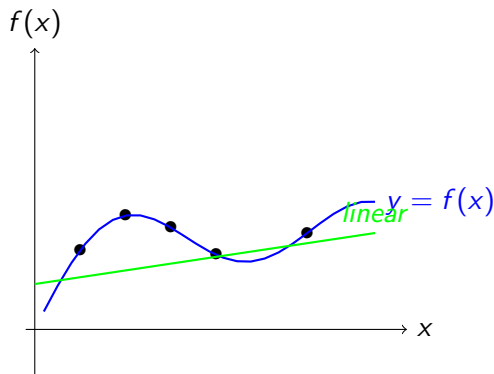**Add dropout layers** Randomly remove certain features by setting them to zero.

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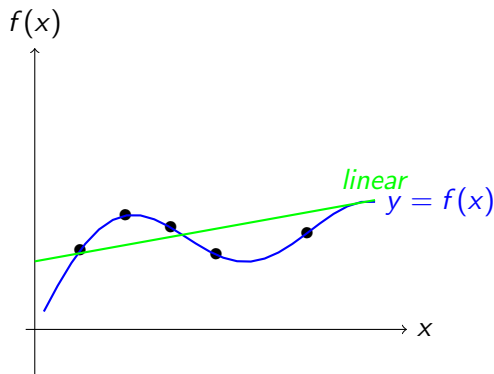**Add dropout layers** Randomly remove certain features by setting them to zero.

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