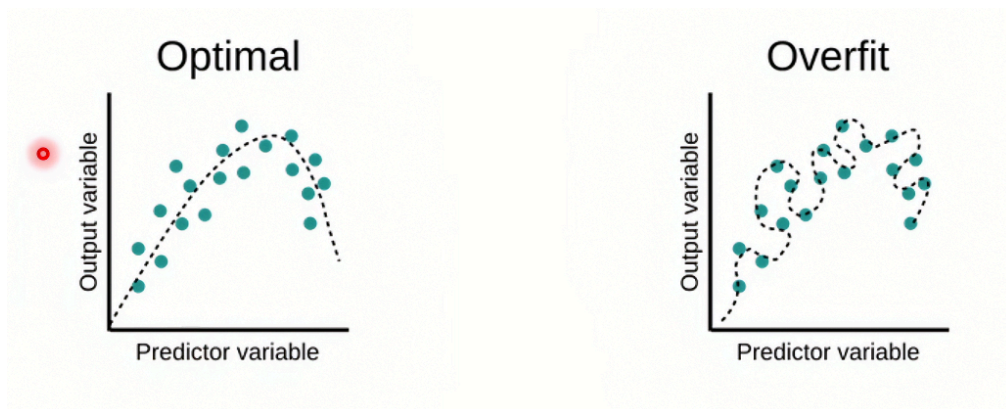# Overfitting In ML

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Overfitting refers to a model that models the training data too well. Overfitting happens when a model learns the detail and noise in the training dataset to the extent that it negatively impacts the performance of the model.

Sign of overfitting : high training data accuracy and very low test data accuracy

Causes for overfitting:

1. Less Data

2. Increased Complexity of the model

3. More number of layers in Neural Network

Prevention of overfitting:

1. Using more data

2. Reduce the number of layer in neural network

3. Early stopping

4. Bias-Variance Tradeoff (optimizing model technique)

5. Use dropouts (Used in Deep Learning)