**Regularization**

1. **Problem of Overfitting**
2. **Cost Function**

Make and really small.

Cost function:

Regularized cost function

Regularization term

Regularization parameter

1. **Regularized Linear Regression**

**Gradient descent :**

**Normal Equation**

1. **Regularized logistic regression**

Cost function of logistic regression

Regularized Cost function of logistic regression

**Gradient descent (looks identical to linear regression) :**