

线性回归梯度下降

平方差代价函数: $J(\theta_0, \theta_1) = \frac{1}{2m} \sum_{i=1}^m (h_{\theta}(x^{(i)}) - y^{(i)})^2$

$h_{\theta}(x) = \theta_0 + \theta_1 x$ 拟合直线, ~~拟合函数~~

梯度下降: $\theta_j = \theta_j - \alpha \cdot \frac{\partial}{\partial \theta_j} J(\theta_0, \theta_1)$



$$\theta_0 = \theta_0 - \alpha \cdot \frac{1}{m} \sum_{i=1}^m (h_{\theta}(x^{(i)}) - y^{(i)})$$

$$\theta_1 = \theta_1 - \alpha \cdot \frac{1}{m} \sum_{i=1}^m (h_{\theta}(x^{(i)}) - y^{(i)}) \cdot x^{(i)}$$

更新 θ_0, θ_1 , 最终得到局部最优解
代价函数减小

