< Advice for applying machine learning - Deciding what to try next >

* Debugging learning algorithm

ex) housing price prediction problem을 해결하기 위해서 regularized linear regression을 implement

$$J(\vec{w},b) = \frac{1}{2m}\sum_{i=1}^{m}(f_{\vec{w},b}(\vec{x}^{(i)}) - y^{(i)})^2 + \frac{\lambda}{2m}\sum_{j=1}^{n} w_j^2$$

⇒ 만약 이 model (hypothesis)을 사용하여 training set에 없는 새로운 데이터를 적용하자 예측에러가 너무 크다면?

⇒ • get more training examples
- Try smaller sets of features
- Try getting additional features
- Try adding polynomial features (x_1^2, x_2^2, x_1x_2, etc)
- Try decreasing / increasing λ (lambda)