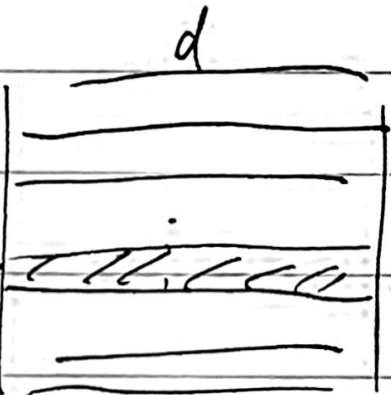


1.3.

$$\nabla_{\theta} \bar{J}(\theta) = \frac{1}{m} \sum_{i=1}^m (\hat{h}_{\theta}^{(i)} - y^{(i)}) \underbrace{\vec{x}_i}_{\substack{\text{arrow from } \vec{\theta}_m \\ \text{matrix}}} + \frac{\lambda}{m} \sum_{j=1}^d \vec{\theta}_j$$



~~XX~~