

Homework 5

$$\frac{\partial J}{\partial w} = \frac{\partial J}{\partial \hat{y}} \cdot \frac{\partial \hat{y}}{\partial O} \cdot \frac{\partial O}{\partial M} \cdot \frac{\partial M}{\partial c} \cdot \frac{\partial c}{\partial w}$$

$$\frac{\partial J}{\partial w} = (\hat{y} - y) \text{Relu}'(MU + b_2) \cdot U^T I \cdot \text{Relu}'(w \cdot x_{i:i+h-1} + b_1) x_{i:i+h-1}^T$$

$$w = w - lr * \frac{\partial J}{\partial w}$$