

$$\frac{\partial R}{\partial w_{jk}} = \frac{1}{N} \sum_n \left[ \sum_l \frac{\partial L_n}{\partial a_{l,n}} \frac{\partial a_{l,n}}{\partial a_{k,n}} \right] \left[ \frac{\partial a_{k,n}}{\partial w_{jk}} \right]$$