# ML Week 0x07c Backpropagation

## Rétropropagation du gradient

#### Chain rule:

- théorème de dérivation des fonctions composées
- règle de dérivation en chaîne
- règle de la chaîne

#### Problem

- We know we can make non-linear decision boundaries with deep networks
- Different features at different levels

## Algorithm

- $\bullet$  Consider 1, 2, then n neurons. Note that it's an optimisation problem.
- Naive (what everyone thinks of first): hill climbing feed-forward.
- Solution: hill climbing with errors going backwards
- Explain about black boxing successive layers and computing previous hidden layers
- Note that we don't compute node values, only weights!