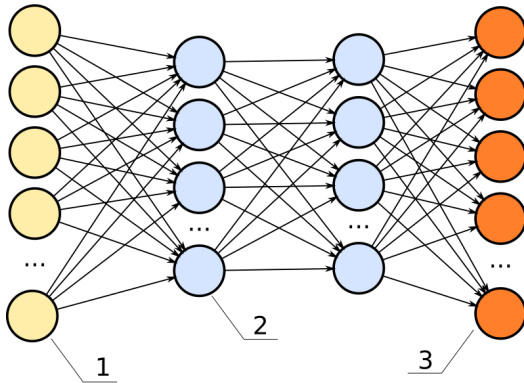


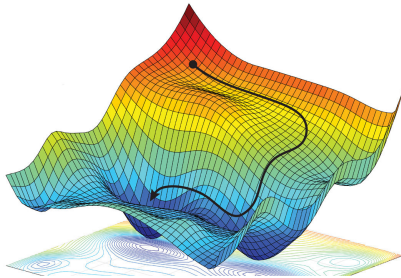
# **Deep Learning par la Pratique**

Cours 2 : Keras et Convolutional Neural Networks

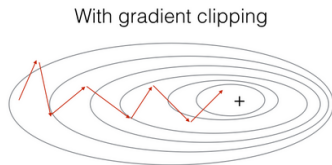
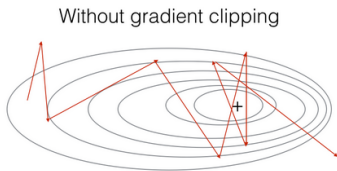
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# Rappels



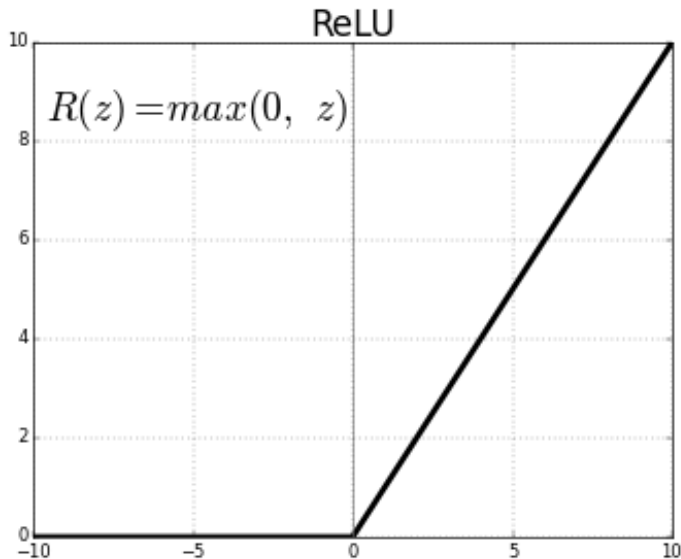


Exploding Gradient  $\Rightarrow$  Gradient clipping



## Rappels

Vanishing Gradient  $\Rightarrow$  utilisation de ReLu plutôt que les sigmoïdes



Optimisateur plus rapide que SGD

- Root Mean Square Propagation (RMSProp)
- Adaptive Gradient Algorithm (AdaGrad)
- Adaptive Moment Estimation (Adam)  $\Leftarrow$
- ... AdaBound (2019) ?

