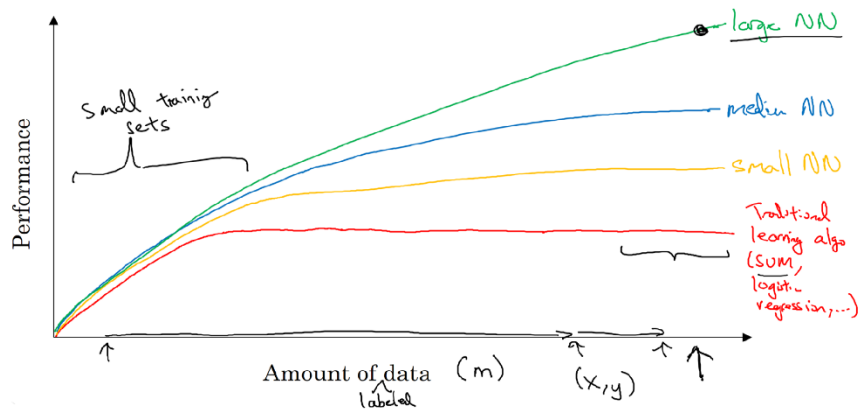# Why is deep learning taking off?

Deep learning is taking off due to a large amount of data available through the digitization of the society, faster computation and innovation in the development of neural network algorithm.
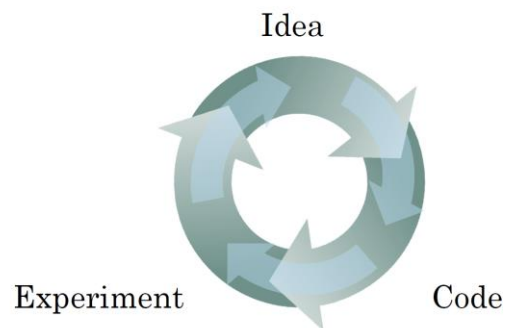

Scale drives deep learning progress

Two things have to be considered to get to the high level of performance:

1. Being able to train a big enough neural network
2. Huge amount of labeled data

The process of training a neural network is iterative.

It could take a good amount of time to train a neural network, which affects your productivity. Faster computation helps to iterate and improve new algorithm.