

# CNN vs RNN

Wednesday, October 31, 2018 12:09 PM

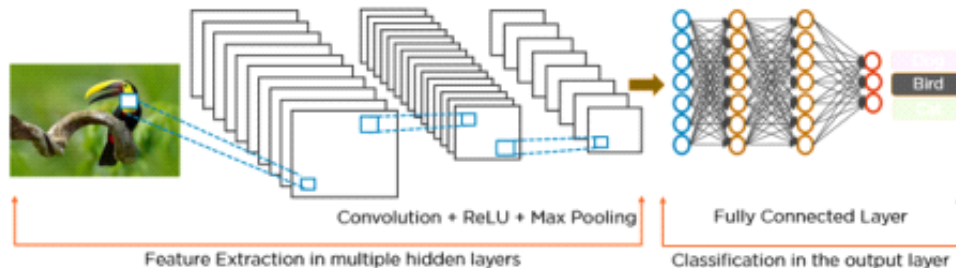
**CNN** is a **feed forward neural network** that is generally used for Image recognition and object classification. While **RNN** works on the principle of saving the output of a layer and feeding this back to the input in order to predict the output of the layer.

CNN considers only the current input while RNN considers the current input and also the previously received inputs. It can memorize previous inputs due to its internal memory. CNN has 4 layers namely: Convolution layer, ReLU layer, Pooling and Fully Connected Layer. Every layer has its own functionality and performs feature extractions and finds out hidden patterns.

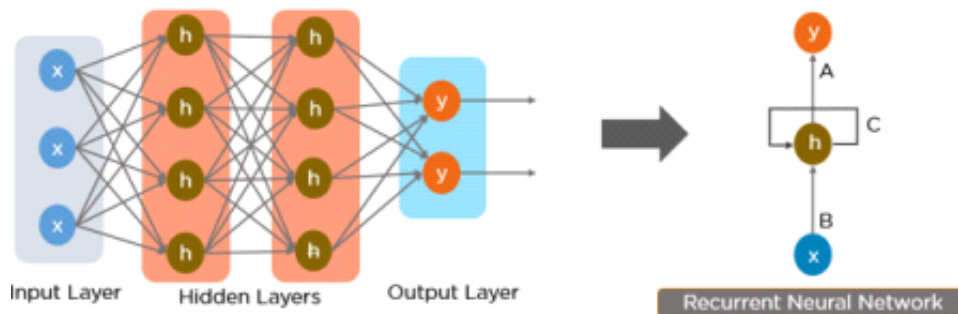
There are 4 types of RNN namely: One to One, One to Many, Many to One and Many to Many. RNN can handle sequential data while CNN cannot.

Below is an example of how CNN looks like:

From <<https://www.quora.com/What-is-the-difference-between-CNN-and-RNN>>



A Recurrent Neural Network looks something like this:



From <<https://www.quora.com/What-is-the-difference-between-CNN-and-RNN>>