1. Stride is a technique for lowering parameters while at the same time lowering some of the adverse effects. By examining the regions and assuming that the next layer's node has many overlaps with its neighbors, the authors of the research made the simple assumption that they could influence the overlap by adjusting the stride.
2. One of the drawbacks of the convolution step is the potential loss of information at the image's edges. They never get the chance to be viewed since recordings only ever take place when the filter slips. To solve the issue, the author suggested using zero-padding. Zero padding also has the benefit of allowing output size control. The padding idea prevents the size of our network output from growing as depth increases. This is feasible because deep convolutional networks may be used in any number.
3. Convolution layer is the most important layer in CNN. It takes most of the time within the network. Network performance also depends on the number of levels within the network. But on the other hand as the number of levels increases the time required to train and test the network.
4. Max pool is one of the most used pooling techniques. Down-sampling is the key component of pooling, which is used to make subsequent layers less difficult. The image is divided into rectangular subregions, and only the highest value inside each subregion is returned. 22 is one of the most typical sizes used in max-pooling. Pooling moves 2 and concentrates on the top-right portion when it is applied to the top-left 22 blocks. Thus, pooling involves using stride 2. Stride 1 was applied in order to prevent down-sampling. Since downsampling does not maintain the position of the information, it should only be used when the information's presence is crucial (rather than spatial information).

The advantages of CNN over traditional neural networks are numerous.

The greatest significant aspect of CNN's is the decrease in ANN parameter complexity.

As a result of this achievement, scientists and programmers are now using bigger models to solve complex issues that traditional neural networks were unable to manage.

The idea that there shouldn't be any spatially dependent characteristics is the most important one for understanding how CNN solves issues.

Therefore, while utilizing a face detection program, we do not need to concentrate on where the faces are located inside the photos.

The only thing that counts is that they be found, regardless of where they are in the given photos.

Another essential element is the discovery of abstract characteristics when input propagates to deeper levels of the CNN.