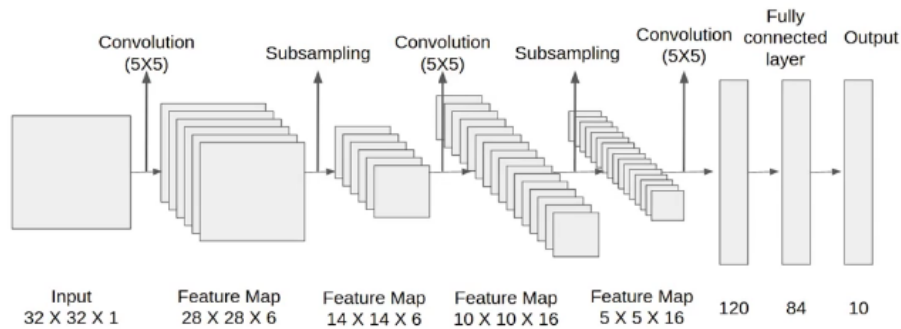


Lecture 19 - LeNet5

LeNet5, initially devised by Yann LeCun, introduced the concept of a convolutional neural network with a gentle touch. Announced in 1995, it laid the foundation for what we now know as CNN. LeNet5 gracefully navigates through convolution and downsampling, culminating in classification within the fully connected layer.



The first convolutional layer generates a 28x28x6 feature map using a kernel(5x5). Subsequently, pooling reduces it to 14x14x6. In the second convolutional layer, a 10x10x16 feature map reemerges with a kernel(5x5), which is then pooled to a size of 5x5x16. The network concludes with three successive fully connected layers: 400->120, 120->84, and 84->10. Finally, classification takes place through the gentle embrace of the softmax function.