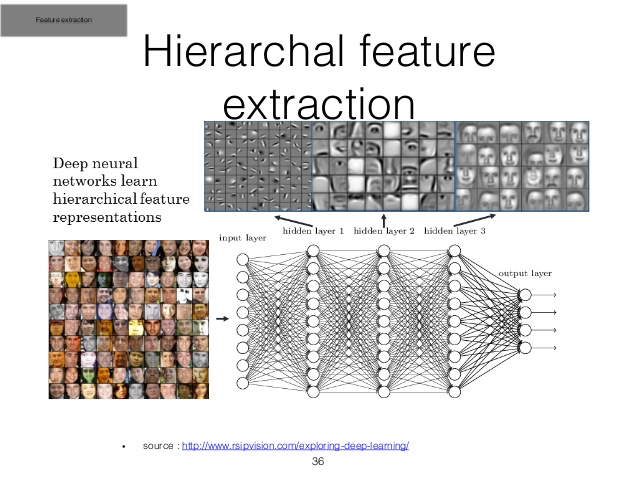
Face Recognition

Facial recognition system is a technology able to identify or verify a person identity from an image. They are a variety of ways in which a Facial recognition system can be built and this piece we will use a binary classifier. So, what is a binary classifier? A binary classifier is basically a machine learning algorithm that based on input features into the algorithm, predicts or classifies whether the features inputted features are of a certain class or not.



In the context of our current subject Facial Recognition, the classifier predicts whether the facial features are of a person in a database or not. To obtain the facial features of an image, a feature extractor will be used, this feature extractor will be in the form of pretrained Deep neural network.

Pre-trained networks saved model that have been already trained on large datasets. Why use a pretrained network?....... Why the heck not? Why waste valuable time and money re-inventing the wheel? When you can build on what others have built. Pre-trained networks help in speeding up the training process and works well in cases where you don’t have much data. When used in this fashion it’s referred to as transfer learning. Most experts almost always use pre-trained models unless they are working on something very specific.



Within the limits of this piece, the pretrained model is used as feature extractor which produces a 128-dimensional feature vector to which after some preprocessing is passed into a binary classifier.

