## Bias

prejudice in favor of or against one thing, person, or group compared with another, in a way that is considered unfair

## **Blind Auditions**

When a big-city symphony wants to hire musicians, they do not judge the applicants on their appearance; they judge them only on their musical ability. That seems fair, doesn't it? But that hasn't always been the case. At one time, more men than women were hired to play in symphonies. For some reason, the judges preferred male musicians. Today, however, most symphonies listen to the musician applicants from behind a screen so they can't see what they look like. Sometimes the musicians even have to take off their shoes so the judges can't get hints from their footsteps about whether they are listening to a man or woman. Although that may seem unnecessary, it has been proven to be the fairest way to hire. Now, because of the practice of "blind auditions," the balance of men and women is more equal. This is how the symphony overcame a bias. It wasn't enough just to be aware they had a bias; they had to guarantee it with a "blind audition" so they wouldn't let their bias toward male musicians influence their decisions.

## Google Photos Algorithm biased against black people

Google Photos has a labeling feature that adds a label to a photo corresponding to whatever is shown in the picture. This is done by a Convolutional Neural Network (CNN) that was trained on millions of images in supervised learning and then it uses image recognition to tag the photos. However, this **Google** algorithm was found to be racist when it labeled the photos of a black software developer and his friend as gorillas. Google claimed that they were appalled and genuinely sorry for this mistake and promised they would correct it in the future. However, all Google had done until 2 years later was removing gorillas and other types of monkeys from Convolutional Neural Network's vocabulary so that it would not identify any photo as such. Google Photos displayed "no results" for all search terms relating to monkeys such as the gorilla, chimp, chimpanzee, etc. However, this is only a temporary solution as it does not solve the underlying problem. Image labeling technology is still not perfect and even the most complex algorithms are only dependent on their training with no way to identify corner cases in real life.