## Performance Metrics

For measuring the effectiveness of a fingerprint matching algorithm. There are two main standardized performance metrics, these are

1. False Acceptancy Ratio (FAR)
2. False Rejection Ratio (FRR)

Other performance metrics include

1. Algorithm completion time

### False Acceptance Ratio (FAR)

False acceptance ratio is a unit used to measure the average number of false acceptances in a biometric system. FAR measures and evaluates both the efficiency and accuracy of a biometric system by determining the rate at which the system wrongfully verifies a user. It as calculated by dividing the number of false acceptances by the total number of attempts.

### False Rejection Rate (FRR)

False Rejection Rate (FRR) is the percentage of identification instances where authorized persons are incorrectly rejected. Similar to FAR, it is calculated by diving the number of false rejections by the total number of attempts.

## Relationship between FAR and FRR