Biometric Authentication

Enrollment

1) Sensor module acquires the biometric sample from the target

   stored on server as a template

2) A feature extraction module records the features in the sample that Uniquely ID the target

Different pattern types to Identify Users

physical
- eyes
- Facial recognition
- Finger prints

Behavioural
- pattern
- Voice
- Signature

Efficacy Rates + Considerations

- False recognition rate / Type 1 / False Non Match Rate (FRR)

  • Measured in %

- False Acceptance Rate (Accepting unauthorised users) / Type 2 (FAR)

  • The most Important / Critical one

- Crossover Error Rate (CER)

  • Measures FRR + FAR in %
  • The lower the CER the better the technology is

- Throughput (speed) -/ Important for high traffic access point/

  • Time taken to create a template and authorize the user.

- Failure to Enroll date (FER)

  • Template can not be created + matched to user

- Cost

- Privacy Concerns

- Accessibility concerns (no hands)