Privacy protection of biometric templates

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Human identification based on biometric identifiers (fingerprints, iris,...) provides a very convenient way for providing access to a variety of services. Their main benefit originates from the fact that biometrics can not be forgotten, stolen or lost in contrast to for instance passwords. There is however a privacy problem related to biometrics. As biometrics are unique for an individual, they contain sensitive information about that person. Hence they have to be kept private. Therefore, the biometric templates can not be stored in the clear. In this talk we discuss and analyze how cryptographic techniques can be used to solve this problem. Since biometric data are inherently noisy, cryptographic techniques can not be used in a straightforward way but additional processing, that does not compromise the privacy, has to be performed.