A biometric is defined as a unique, measurable, biological characteristic or trait for automatically recognizing or verifying the identity of a human being. Statistically analyzing these biological characteristics has become known as the science of biometrics. These days, biometric technologies are typically used to analyze human characteristics for security purposes. In this paper we describe a method for integrating together cryptography and steganography through image processing. In particular, we present a system able to perform steganography and cryptography at the same time using images as cover objects for steganography and as keys for cryptography. In this paper we will present some schemes for strengthening personal authentication over insecure channels with biometric concepts or how to
securely transfer or use vein biometric characteristics. Our concept can be applied on any biometric authentication scheme and is universal for all systems.

Reference

- Hamdan.O.Alanazi, A.A.Zaidan, B.B.Zaidan, Hamid A.Jalab and Zaidoon Kh. AL-Ani,


**Index Terms**

Computer Science Security

**Key words**

Biometric Template Compression

Steganography

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