

Abstract

With the development of science and technology, the security of personal data has been paid more and more attention for identity authentication of increasingly high demand, now the biological recognition technology is very developed and widely used, from immigration to a variety of portable devices such as smart mobile phone, notebook computer, can see the shadow of biological identification device. According to the IBG (International Biometric Group, the International Biometric group) statistics in 2009, the market has a variety of physiological features (iris, fingerprint, face image) and behavioral characteristics (handwriting, voice) application, which the highest share is fingerprint recognition. At the same time, according to the information from National Chung-Shan Institute of Scientific and Technology, laser scanning can be carried out in vivo fingerprint recognition, and cannot be copied. However, now on the market of these identification technology still has many loopholes and risks of data leakage, perfect identity recognition technology must have uniqueness and universality, permanence and other characteristics, so we plan to develop a Personal Fingerprint Identification System Based on Laser Speckle Patterns. The purpose is to use the laser fingerprint feature data is not easy to be imitated characteristics to improve the reliability of biological identification technology, the protection of personal information security, to reduce the possibility of data leakage.