Abstract

The fingerprint is a powerfully applicable tool for person authentication in commercial business, civil, and forensic usage. Minutiae points and ridge patterns consider the main source of features that mostly used in recent fingerprint identification systems. In this paper, Scale Invariant Feature Transform (SIFT) is extensively used for representation and extraction of features. After that, RANSAC algorithm is used for determining the matching area exactly. Database of International Fingerprint Verification Competition (FVC2000 and FVC2002) has used in experimental results. Finally, the results have compared with other works. Empirically, the results of the proposed algorithm were acceptable and better.

References

2. Stoianov, Alex, Colin Soutar, and Allan Graham. “High-speed fingerprint verification using

Index Terms

Computer Science Security

Keywords
Fingerprint matching, Feature extraction, SIFT, RANSAC.