Speeding up High Resolution Palmprint Matching by Using Singular Points

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Abstract

Applications for palmprints range from civilian scenarios to forensics where palmprints technologies are urgently needed given that they are frequently found in crime scenes. However, for forensic applications, the resolution needed for palmprint images pose a challenging problem due to the factor that matching algorithms are time-consuming. Although widely explored in fingerprints, singular points have not yet received the same attention from palmprint researchers. In this article, an exploratory study is conducted to validate the hypothesis that singular points can be used effectively to speed up palmprint matching systems. Experimentation show how it is possible to accomplish the above while obtaining acceptable recognition rates.

Keywords: *Palmprint matching, Singular points, Biometrics Forensics*

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