The Designing of a Simulation Model through Matlab of Fingerprint Recognition

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Abstract.

Biometrics, the fingerprint recognition especially, is faced with many algorithmic designing issues. (Kumar, 2017, p.56)

This research treats a model of fingerprint identification simulation program for an open source database of fingerprints. The aim of this research consists in highlighting the importance of these techniques in different applications.

The program introduces these fingerprints sequentially, that are associated with an ID, and realizes fingerprint recognition with a certain biometric search algorithm.

Recommendations of this research approach in improving the search algorithms in time prospective and. The research is limited in the number of fingerprints being included in the database.

Keywords. fingerprint, Matlab, recognition, simulation

References

Giuliano., A. (2016) "Fingerprint Indentification Handbook" Edizioni Minerva Medica, 23

Kumar., A. and Bhanu. B. (2017) "Deep Learning for Biometrics (Advances in Computer Pattern Recognition)", Springer Verlag, 56

Labati., R. and Piuri., V. And Scotti., F. (2017) "Touchless Fingerprint Biometrics (Series in Security, Privacy and Trust)", CRC Press, 67-68

Maltoni., D and Maio., Dario. (2014) "Handbook of Fingerprint Recognition", Springer Verlag, 23-26

Rahaman., A. (2016) "Gabor Filter for Minutiae Based Fingerprint Recognition", Lambert Academic Publishing, 57