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A Slap Fingerprint based Verification System invariant to Halo and Sweat Artifacts

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**Highlights**

- Nonlinear analysis of orientation field is used to solve a real world problem for security.
- Multiple fingerprints are spuriously merged in the proposed system due to halo and sweat.
- Model based reasoning is used to detect and separate multiple fingerprints from an image.
- Performance of the slap fingerprint system is improved by removing sweat and halo artifacts.
- Experimental results show the superiority of the proposed system over other existing systems.

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