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Fingerprint Classification using CNN for Forensic Analysis

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Abstract: *In forensic medicine, DNA fingerprinting for identification is becoming a necessary procedure. Analysing fingerprints left at the scene of a crime is one of the most critical parts of forensic analysis. Fingerprint analysis typically helps to connect the crime to a person who may have been present at the scene but can also be used to track a person's previous records; arrests, parole, and other details. Thus, it is required to create a fingerprint identification system. This work proposed a fingerprint identification system using deep learning for investigation purpose. The dataset for the fingerprint identification is downloaded from public domain and it contains fingerprint images of different persons. The algorithm used for the proposed fingerprint identification system is Convolutional Neural Network (CNN), which is a deep learning algorithm. The algorithm extracts feature from the input data and features is used to identify person.*

Keywords: CNN, Fingerprint image , Image processing

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