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Infant iris biometric recognition system: Can the iris be used for a secure infant recognition system?

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Abstract

This study examines the application of infant iris biometrics as a method of identification for newborns and young children. Infant iris photos were collected using an IriShield-USB BK 2121U camera at a variety of locations, including public clinics and preschools. Before image segmentation, the quality of acquired images was evaluated. Subsequently, the traits were retrieved and matched online and the matching results were good enough to distinguish between minors two years old and older. However, the system did not show adequate recognition performance for infants under the age of two years. This approach can be used successfully to track the stability of iris traits from conception to death, as well as to identify minors from birth.