

CONJUNCTIVAL SCANNING FOR BIOMETRIC IDENTIFICATION

Researchers at UMKC have developed a biometric device which recognizes the physical characteristics of sclera veins which are visible through the conjunctival membrane in the human eye. The vascular structures of the conjunctiva and episclera are rich with specific details that are useful in identifying individuals. Unlike retinal scans, the vascular structures of the conjunctiva and episclera provide extensive and unique information that can be obtained from various and selected regions of the eye and processed to authenticate or identify individuals. The technology can work with less light, on non-compliant targets, and from much greater distances than currently employed methods. It can function as a stand-alone biometric or could be used in conjunction with existing ocular-based biometrics to achieve enhanced performance and spoof-proofing.

POTENTIAL AREAS OF APPLICATIONS:

- Airport /border security
- Law enforcement
- Casinos
- Private security

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