

Biometric Eye Model and Ray Tracing for Improved Iris Recognition

Disclosure Number

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Technology Summary

The invention disclosure relates to security systems and more specifically to iris recognition. Iris recognition has been proven to be an accurate and reliable biometric. However, the recognition of non-ideal iris images such as off angle images is still an unsolved problem. We propose a new biometric targeted eye model and a method to reconstruct the off-axis eye to its frontal view allowing for recognition using existing methods and algorithms. This allows for existing enterprise level algorithms and approaches to be largely unmodified by using our work as a pre-processor to improve performance.

Inventor

SANTOS VILLALOBOS, HECTOR J

Measurement Science & Systems Engr Div

Licensing Contact

SPEIGHT II, MELVIN D

UT-Battelle, LLC

Oak Ridge National Laboratory

Room 143, 4500N, MS: 6196

1 Bethel Valley Road

Oak Ridge, TN 37831

Office Phone: (865) 241-6564

E-mail: DSPEIGHT@ORNL.GOV

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