LICENSING OPPORTUNITY

A METHODOLOGY FOR DETECTING FACE MORPHING USING ONE-TO-MANY FACE RECOGNITION ALGORITHMS

NIST NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY U.S. DEPARTMENT OF COMMERCE

Patent Application Filed

DESCRIPTION

Problem:

Face morphing (two or more facial images are combined) is a known vulnerability to automated facial recognition. While face morphing has been used for benign entertainment purposes, it can be used for nefarious purposes such as identity fraud.

Invention:

A morph detection method that uses one-to-many (1:N) face recognition algorithms to detect the presence of face morphing under certain scenarios.

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BENEFITS

Commercial Applications:

- Detection of morphed images for organizations that accept user submitted application photos during renewal processes.
- Adaptable methodology for eGate systems that can connect to backend databases.

Competitive Advantages:

- **User Convenience:** Reduced false detection rates when compared to other conventional morph detection algorithms.
- **Cost Efficient:** Can leverage existing one-to-many face recognition infrastructure by adapting this methodology.

(a) Subject A *(b) Subject (A+B)* *(c) Subject B*