Image-Projection Plus Facial Recognition User Authentication

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Overview

User Authentication Method

- Facial recognition combined with user interaction
 - Image user's face
 - Selection of images from predefined image category and offset
- Projection of selected images onto image of face
- Matching of defined facial features for authentication



Project Objective

- Further increase user controlled security for an application or workstation
- Utilize facial recognition as well as projection, rotation, and an image grid to verify identity
- Protect users so that authentication cannot be compromised by either keystroke monitoring or looking over the shoulder

Use Cases

Physical Access Control

Identify verification of age

Network User Authentication

Technology and Algorithms

- Python
- OpenCv
- Pillow
- Face_recogntion
- Haar cascade

Stakeholders

Enterprises and Corporations: Large organizations often deal with sensitive data and need robust authentication methods to protect their assets. They may implement this security feature to ensure that only authorized employees can access certain areas or systems.

Government Agencies: Government agencies frequently handle highly confidential information and require stringent security measures. Facial recognition can be used to enhance access control for secure facilities and data.

Users of Technology: Increased trust in the protection of their information as well as an improved user experience.

Thank You