

Coarse-grained classification

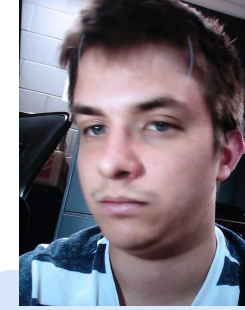


Spoof

Users: Is the face in the image real or spoof ?

FaceShield: **The face in the image is a spoof**, as it is cleverly concealed by a paper with printed eyes, which is a common technique used to create a fake appearance.

Reasoning



Spoof

Users: Why the face in the image real or spoof ?

FaceShield: According to the picture, from the "**Face Facial Lighting**" the lighting seems uneven and unnatural, suggesting artificial illumination. The "**Global Shape Consistency of Facial Features**" appears distorted, lacking natural symmetry. The "**Sense of Depth and Three-Dimensionality**" is flat, missing the natural depth cues found in real faces. Lastly, the "**Presence of Phone Screen or Paper Edges**" is evident, indicating that this face is displayed on an electronic device. **Analyzing these attributes, we can conclude that the face in the picture is a spoof.**

Fine-grained classification



Print Attack

Users: What Attack Type of the face in the image ?

FaceShield: **The face in the image is a Print Attack.** This is evident from the appearance of the paper edges in the picture, indicating that a printed face is used to deceive the face detection system.

Localization



Users: Can you locate the spoof area of the face in the image ?

FaceShield: **The location of the spoof area is [99.0 295.0 341.0 485.0]**, which is the area where the person is holding a card with a printed lower half of their face to cover the real lower half of their face.

