Project Title : Spoof Detection in Human Face

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ABSTRACT: A spoofing attack happens when someone tries to impersonate someone else by fabricating data in order to obtain unauthorised access and advantages. By placing a photo, video, mask, or 3D model of the intended subject in front of the camera, for instance, one might fool a facial recognition system. Although one can also spoof with makeup or plastic surgery, since it's so simple to acquire and capture facial images, photographs are probably the most prevalent source of spoofing attacks. Face recognition technologies are now used by many types of institutions, including the Unique Identification Authority of India (UIDAI), which provides identity to all Indian citizens. Access control using face biometrics is widespread and does not just apply to passwords on mobile devices or gaming consoles like the Xbox. Automatic face recognition systems are employed by Uber's driver verification procedure, AirBnB's requirement for user face profiles, etc.

Objectives	1. For personal identification, biometric methods like facial recognition and finger-print identification are widely utilised. It is safer than any conventional access technique, including passcode, ID card, or keys. Moreover, face recognition technology is more practical than conventional approaches. Facial recognition, however, is frequently vulnerable to presentation attacks.
Knowledge acquired in the listed courses	1. Python and Scientific Python – 18ECE201J
Realistic Constraints	This project uses Pycharm tool – an open ended software, This project does not involve any risks while deploying, if the resources are poor then it may slow down the server while initiation, execution and controlling. This requires complete understanding of Python3.
Standards to be referred/followed	Python3, Linux Server
Multidisciplinary tasks involved	Python3, Linux Server
Deliverables/Outcomes	The user can identify the spoofed face and the original face by the use of convolution network and the ML trained model.