BATCH-20

Gokaraju Rangaraju Institute of Engineering and Technology (AUTONOMOUS)
Department of Information Technology

III -II MINI PROJECT

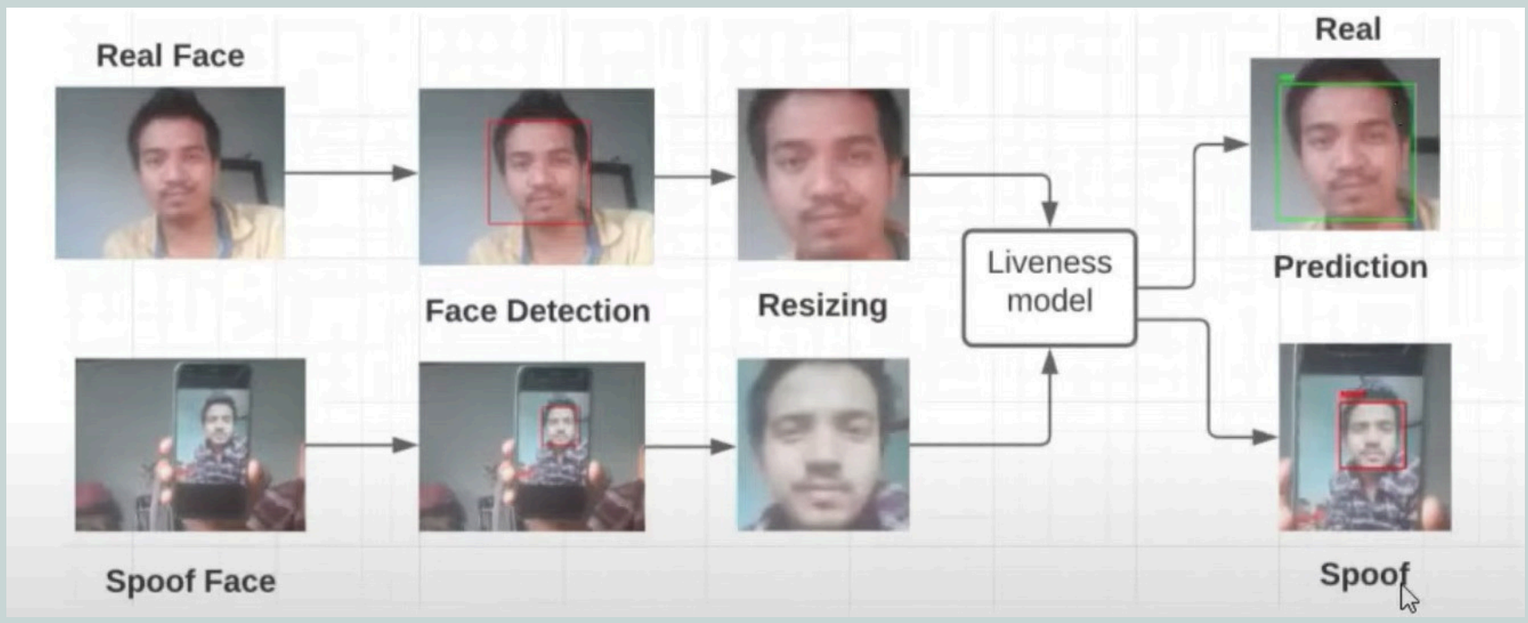
ENHANCING FACE RECOGNITION SECURITY: FACE ANTI-SPOOFING & LIVELINESS DETECTION USING HAAR-CASCADE ALGORITHM

OBJECTIVE

The objective of this project is to develop a robust face anti-spoofing system that leverages the Haar Cascade algorithm for face detection and Convolutional Neural Networks (CNN) for distinguishing between genuine and spoofed faces. The system aims to enhance the security of face recognition systems by effectively identifying and mitigating spoofing attempts.

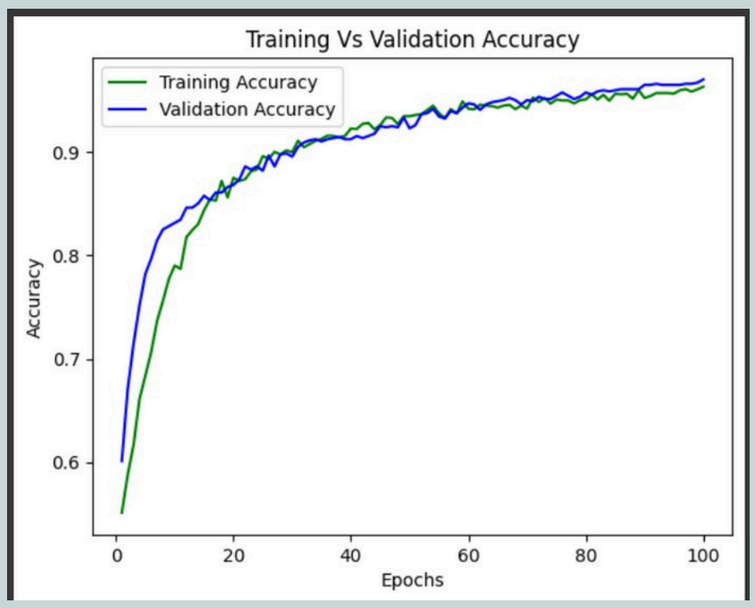
METHODOLOGY

The methodology involves using the Haar Cascade algorithm for initial face detection, followed by a Convolutional Neural Network (CNN) to classify detected faces as genuine or spoofed. The system integrates preprocessing, model training, and evaluation steps to ensure accurate real-time spoof



RESULTS &ANALYSIS

The results demonstrate that the face anti-spoofing system achieves around 96% accuracy with low false-positive rates, effectively distinguishing between genuine and spoofed faces



CONCLUSION

The developed face anti-spoofing system effectively combines Haar Cascade and CNN techniques to enhance face recognition security by accurately detecting spoofing attempts in real- time.

GUIDE:

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