



DEEPFAKE DETECTION

Don't believe everything you see!

ANOUSHKA GUPTA (ag8733)

ARUNIMA MITRA (am13018)

DIVYANSHI PARASHAR (dp3635)

DEEPFAKE DETECTION

Objective: Using CNNs to detect DeepFake in Face Image Data

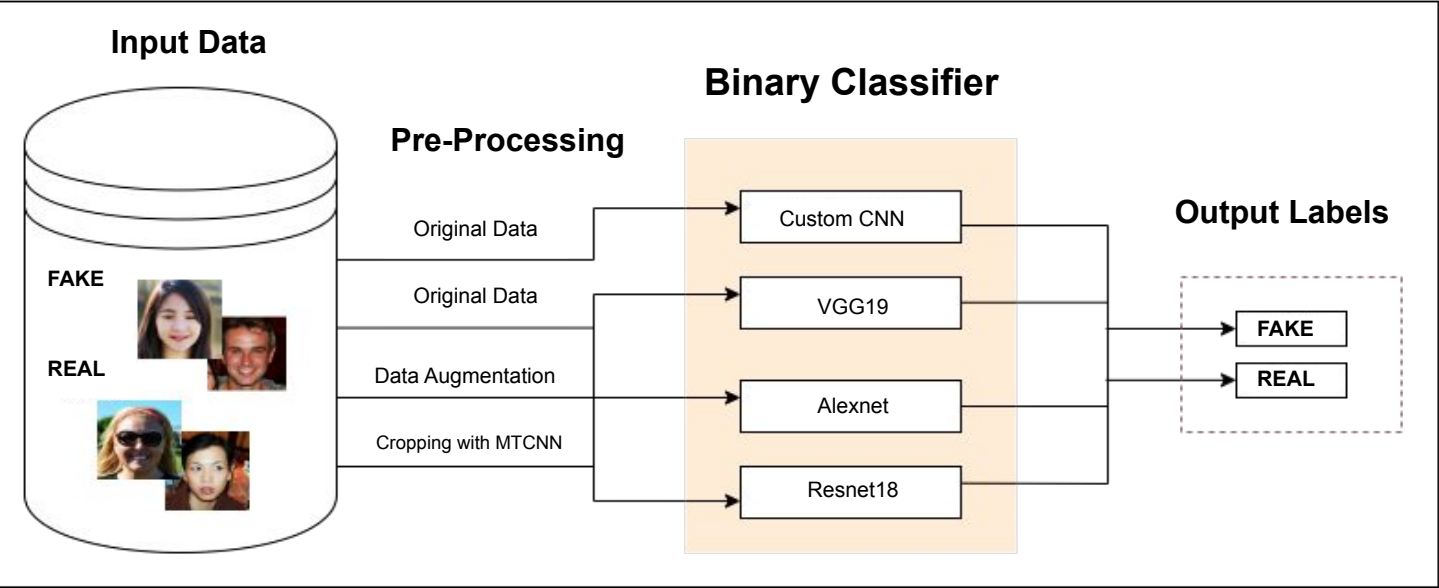


Fig 1: Our WorkFlow: Technical Approach

Models:

VGG19

AlexNet

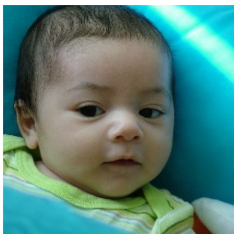
ResNet18



DATA:

MTCNN
GAUSSIAN
(GAUSSIAN +
LOW-RESOLUTION)

ORIGINAL IMAGE



MTCNN-CROPPED



Original Image



Gaussian Noise



Gaussian + Resolution



RESULTS

*Custom CNN 83.4%

Model/ Experiment	Original Data	MTCNN	Gaussian	Gaussian+Resolution
VGG-19	98.139	97.21	95.63	93.53
AlexNet	96.179	96.09	93.69	90.85
ResNet-18	93.995	88.12	93.15	91.48

GRAPHS

