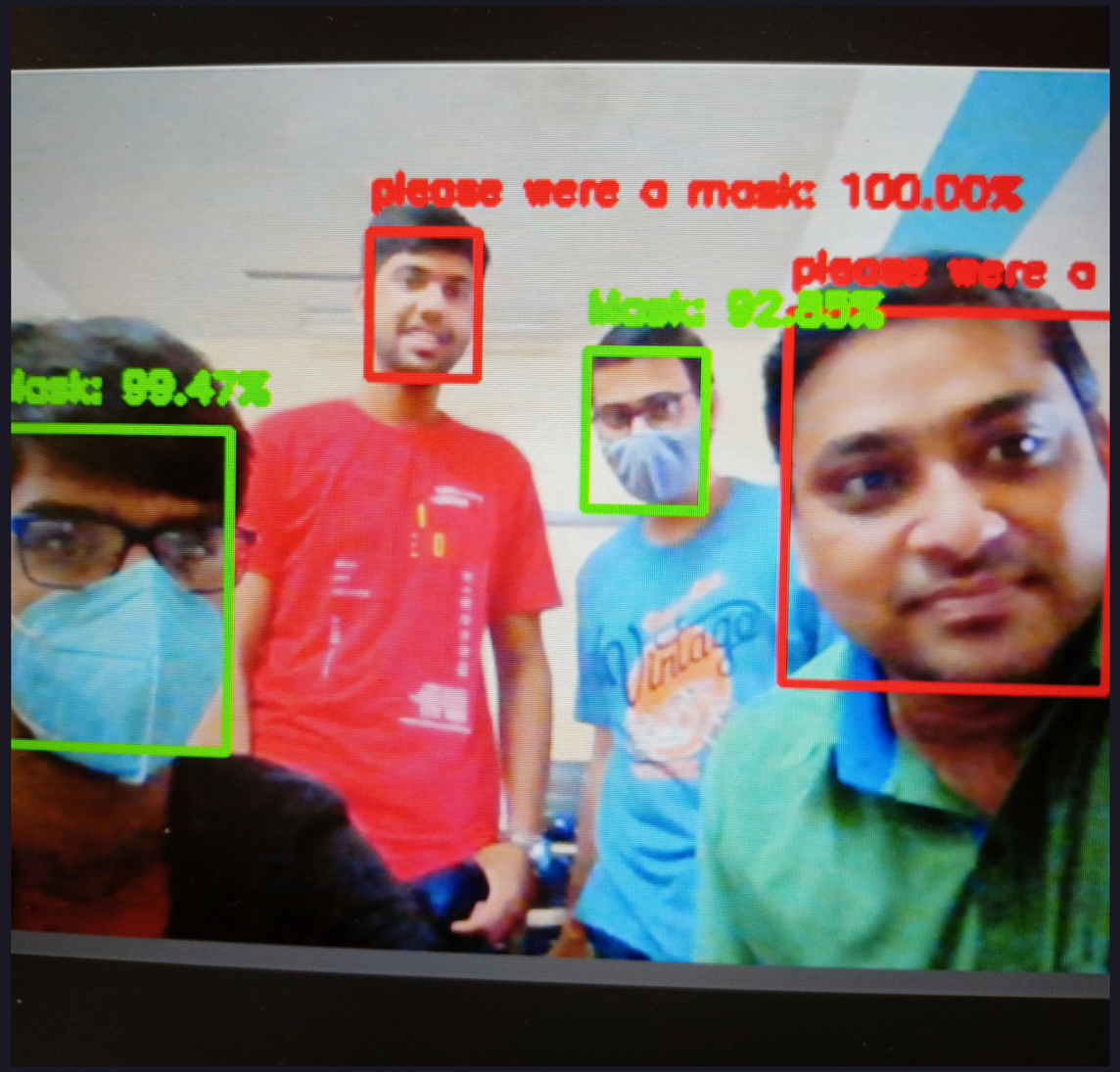
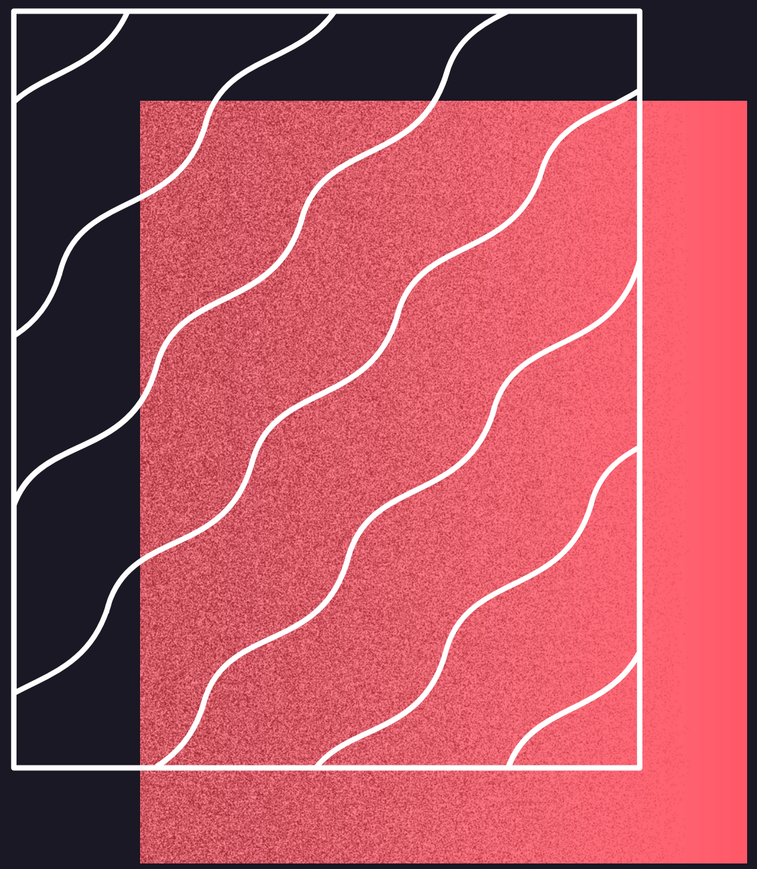


FACE-MASK-DETECTION

Introduction

Face detection is a computer technology being used in a variety of applications that identifies human faces in digital images. Face detection also refers to the psychological process by which humans locate and attend to faces in a visual scene.



PREREQUISTIES

- flask
- imutils
- keras
- matplotlib
- opencv-python
- pandas
- scikit-learn
- tensorflow
- opencv-python

If deployed correctly, the COVID-19 mask detector we're building here today could potentially be used to help ensure your safety and the safety of others (but I'll leave that to the medical professionals to decide on, implement, and distribute in the wild).

Facial landmarks allow us to automatically infer the location of facial structures, including:

Eyes
Eyebrows
Nose
Mouth
Jawline

After the new Coronavirus disease (COVID-19) case spread rapidly in Wuhan-China in December 2019, World Health Organization (WHO) confirmed that this is a dangerous virus which can be spreading from humans to humans through droplets and airborne. As for the prevention, wearing a face mask is essentials while going outside or meeting to others. However, some irresponsible people refuse to wear face mask with so many excuses. Moreover, developing the face mask detector is very crucial in this case. This paper aims to develop the face mask detector which is able to detect any kinds of face mask. In order to detect the face mask, a YOLO V4 deep learning has been chosen as the mask detection algorithm. The experimental results have been done in real-time application and the device has been installed at Politeknik Negeri Batam. From the experimental results, this device is able to detect the people who wear or do not wear the face mask accurately even if they are moving to various position.