PEOPLE COUNT FROM SURVEILLANCE VIDEO

AIM

The aim is to develop a model which is used to count the number of people appearing in a particular frame, which is extracted from a uploaded video.

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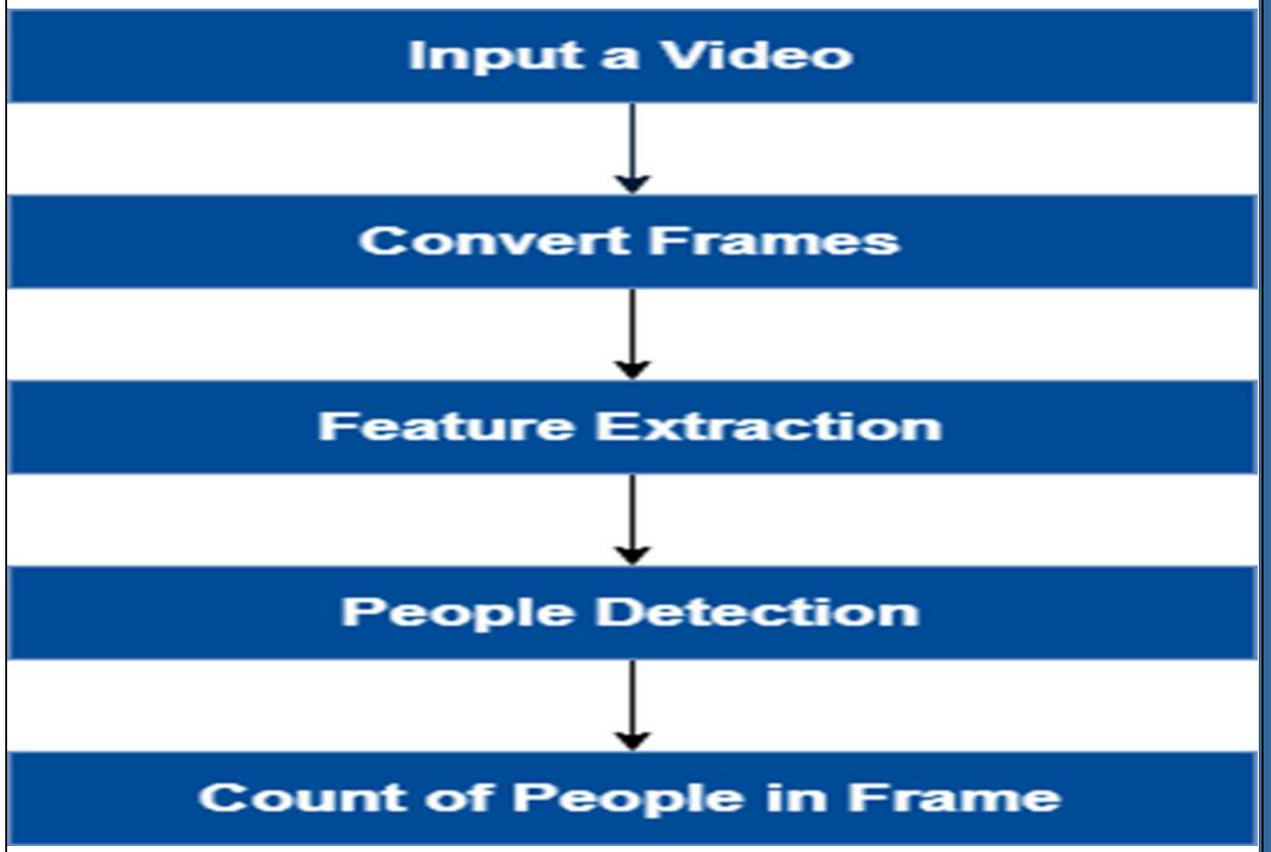
INTRODUCTION

This project automates the counting process by building a machine learning system that can convert a video into frames, then the model will output number of objects in a particular frame. We build the model using **Convolutional Neural Network (CNN)** technique. The system that we build is capable of counting pedestrians in a mall. The images are generated from CCTV that is placed somewhere in the mall. From those images, the system will tell us how many pedestrians at that particular place in the mall. **VGG16** is used to extract the features of the image and Structural Similarity Index **(SSIM)** to measure the similarity between 2 images.

ARCHITECTURE



CONCLUSION

In this project, a model is built for counting numbers of people from a crowd. Here significant algorithms for feature extraction, detection of people and tracking people are used. For feature extraction VGG16 algorithm is used, and the Structural Similarity Index(SSIM) is used to measure the similarity between two images and model can finally count the number of people present.

REFERENCES

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