Project Proposal

Title: Social-Distancing-Analyser

Team Members: Dheeraj Kumar, Bhawani Singh

Project Summary:

A social distancing analyzer tool to regulate social distancing protocol using video surveillance of CCTV cameras and drones. Social Distancing Analyser to prevent COVID19

Technical details of the Projects:

Motivation of the Project: -

- Surveillance for social distancing in crowded places
- To control the spread of COVID-19 pandemic

Definition of the problem: -

One way of limiting the spread of Covid-19, is to practice social distancing. This is not a new concept, as most societies have been aware of the value of keeping away from people who are suffering from an infection for many generations.The objective is to reduce transmission, delaying the epidemic peak, reducing the size of the epidemic peak, and spreading cases over a longer time to relieve pressure on the healthcare system.

Work Plan:

Methodology

- Scoping and planning
- Collecting the training Data
- Training and validating the model
- Deployment

➢ **Time Schedule**

1.Collecting the Training Data:

Collecting the training data set to train the machine learning model, from different sources(1st Week)

2. Preparing the dataset to be fed into the model for the training purpose(2nd Week)

3. Training and tuning the machine learning model for desired output generation and validation of the output(3rd- 4th Week).

7. Exhaustive testing, Testing and validation of the created model at different scenarios. (5th Week)

Proposed outcome/ findings

The proposed model successfully identifies the violation of social distancing in the deployed region and is able to take the predefined action on configuration.

Utilization of the outcome of project:

Social Distancing Analyser automatically detects the extent to which social distancing protocols are followed in the area. Deploying it on current surveillance systems and drones used by police to monitor large areas can help to prevent coronavirus by allowing automated and better tracking of activities happening in the area. It shows analytics of the area in real time. It can also be used to alert police in case of considerable violation of social distancing protocols in a particular area.

Signature of the Guide

Submitted To:

 Ms. Kritika Purohit

Submitted By:
Dheeraj Kumar (18EJICS041)
Bhawani Singh (18EJICS032)