Cursor Manipulation with Hand Recognition Using Computer Vision

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Abstract: This paper aims to make a software program which will Track/Monitor your hand movement in front of the screen through a webcam and will move the cursor of the computing system with respect to your hand movement and can do certain fixed tasks like Right Click, Left Click, Scroll, Drag, Switch Between Programs, Go back, Forward, etc. This program will work in background and use convolutional Neural Networks Model (SSD) to convolve each and every video frame coming from input and at the end will classify the image into classes after further processing of the predicted class it will do necessary operations on Mouse/ Trackpad driver to perform desired operations.