Projector Display Control via Gesture Detection Using Raspberry Pi

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an embedded hand gesture recognition can be brought to the fore as a bridge that connects the computer and live ware using different hand gestures in order to control a displaying event. The demonstrated proposed system of this study enhances the concept of a virtual cursor to interact with a device from a considerable distance away from the device, by deviating from the conventional methodologies of conducting any session or presentation. In fact, the problematic situations that find solutions with the proposed system are to minimize the physical movements performed by a presenter during a particular session or a presentation. Therefore the objective is denoted as to implement a system that functions according to hand gesture signal patterns, using the connected device, Raspberry Pi board, a Camera and a Projector which a presenter can use on any surface with less requirement of hardware. The camera captures gesture patterns and identifies them using Raspberry Pi module. Then the captured gesture patterns will be sent as signals to the computer to do a certain task accordingly. The main aim is to come up with a framework developed with efficiency, accuracy and considerable low-cost which eases any task related to display projection using projectors.

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