

Abstract

We are very much thankful to Douglas Engelbart who first invented computer mouse and which is one of the brilliant innovations of Human Computer Interaction (HCI) era. Presently, wi-fi mouse or a bluetooth mouse never the less make use of gadgets and isn't always free of devices completely since it uses a battery for electricity and a dongle to attached to the laptop or our personal computer. In the proposed AI virtual mouse system, this obstacle may be overcome with the aid of webcam or a build-in camera for the capturing of hand gestures and hand tip detection using computer vision. The algorithm used in the system makes use of the machine learning algorithm. Based totally on the hand gestures, the laptop or personal computer can be managed without a doubt and can carry out left click, right click, scrolling down features, and our personal computer's cursor function without the help of physical mouse. The algorithm is primarily based on deep learning to know the detection of hand and fingers. Consequently, the proposed device will avoid COVID-19 spread by reducing the human intervention and dependency of gadgets to govern or control the computer.