Gesture Controlled Virtual Mouse

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Abstract

The mouse is one of the most brilliant inventions of Human- Computer Interaction (HCI)

technology. Presently, a wireless mouse or a Bluetooth mouse uses devices and is not fully free

of gadgets because it requires a battery for power and a dongle to connect to the PC. This issue

may be solved in the proposed AI virtual mouse system by using a webcam or a built-in camera

to capture hand motions and recognise hand tip using computer vision. The system's algorithm

employs the machine learning algorithm. The computer may be controlled remotely using hand

movements and can execute left click, right click, scrolling, and computer cursor tasks without

the requirement of a hardware mouse. The algorithm is built on deep learning. For detecting the

hands, the programme uses deep learning. As a result, the suggested method will prevent COVID-

19 propagation by eliminating the need for human interaction and the reliance on gadgets to

operate the computer.

Keyword: Computer, Learning, Gadgets, Algorithm, Virtual Mouse