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Mouse Control using Hand Gesture

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Abstract: The mouse, that handy device we use to control our computers, has come a long way in Human-Computer Interaction technology. Even with wireless or Bluetooth mice, we still rely on batteries and dongles to connect them to our PCs. But imagine a new AI-powered virtual mouse system. Instead of needing physical devices, it would use your webcam or built-in camera to track your hand movements and gestures. Using clever computer vision and machine learning algorithms, it could interpret these gestures to control your computer—clicking, scrolling, and moving the cursor—all without an actual mouse. This system, based on deep learning to recognize hand movements, could even help reduce the spread of COVID-19 by removing the need for physical contact and devices to control your computer.

Keywords: Gesture Control Virtual Mouse, Virtual Mouse, Hand Gestures

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