Project Abstract

Abstract:

The virtual mouse

Objective:

The virtual mouse project is a softwareapplication that allows users to control their computer using hand gestures captured by a webcam. The software utilizes computer vision algorithms to track the movement of the user's hand and translate it into cursor movement on the screen. The project aims to provide a more natural and intuitive way of interacting with the computer, eliminating the need for a physical mouse. Additionally, the virtual mouse can be used by individuals with disabilities who may have difficulty using traditional input devices. The project is implemented using a combination of programming languages such as C++ and Python, as well as open-source libraries such as OpenCV, PyAutoGUI and so on. Overall, the virtual mouse project is a unique and innovative solution that aims to enhance the user experience of interacting with a computer.

Programming Language:

- Python

Packages & Software:

S/W- pycharm community

```
#pip library files
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1. opencv-python
2. mediapipe
3. pyautogui
4. protobuf