

-In a world where touchscreens dominate, We Offer a Refreshing Future-

Welcome to the user guide for GestureX, the Hand Gesture Recognition Computer Control System. This system allows you to control your computer using hand gestures, eliminating the need for a physical mouse or keyboard. This guide will help you set up and use the system effectively.

## System Requirements:

- Windows, Mac, or Linux operating system
- Python 3.5 or later installed
- OpenCV and Mediapipe libraries installed

### Installation:

- 1. Download and install Python from the official website.
- 2. Open a command prompt and install OpenCV and Mediapipe using the following commands:
  - "pip install opency-python"
  - "pip install mediapipe"

# System Setup:

- 1. Connect a webcam to your computer.
- 2. Place yourself in a well-lit environment, facing the camera.
- 3. Run the system's Python script.

## Using the System:

- 1. On the system start-up, place your hand within the camera's frame.
- 2. Ensure your hand is well-illuminated and clearly visible.
- 3. The system will start detecting and tracking your hand.
- 4. Move your index finger in the air to control the cursor movement.
- 5. Perform a scissor like gesture to simulate a click.
- 6. Use a different hand gesture to simulate other mouse actions like scrolling.
- 7. Refer to the system's documentation for a list of supported gestures and their corresponding actions.

#### Troubleshooting:

- If the cursor movement is inaccurate, ensure that your hand remains within the camera's view.



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- If the system fails to recognize your gestures, try repositioning your hand or recalibrating the system.
- If the system crashes, check if all required dependencies are properly installed and up to date.