Hand Gesture-Based Game Control System

# Overview

This project uses OpenCV, imutils, and pynput to track hand movements and convert them into keyboard inputs for basic gaming controls:  
- Left hand: Accelerate (W) and Brake (S)  
- Right hand: Steer Left (A) and Steer Right (D)

# How It Works

1. Run gesture\_control.py.  
2. Look at the webcam. After a short countdown, the app will capture a frame.  
3. Select your left hand (used for acceleration/brake) using the mouse and press Enter.  
4. Then select your right hand (used for steering) and press Enter.  
5. Once initialized, move your hands in front of the webcam:  
 - Move left hand up/down → W / S  
 - Move right hand left/right → A / D

# Requirements

Install dependencies using:  
  
pip install opencv-python opencv-contrib-python imutils pynput  
  
Make sure your webcam is connected and not used by other applications.

# Notes

- This is a basic prototype — best used for fun or educational purposes.  
- Works better in good lighting and with clear background contrast.  
- If the trackers lose your hand, re-run the script and reselect the ROIs.