

## **main.py**

```
import cv2

import mediapipe as mp

import pyautogui

cam = cv2.VideoCapture(0)

face_mesh = mp.solutions.face_mesh.FaceMesh(refine_landmarks=True)

screen_w, screen_h = pyautogui.size()

while True:

    _, frame = cam.read()

    frame = cv2.flip(frame, 1)

    rgb_frame = cv2.cvtColor(frame, cv2.COLOR_BGR2RGB)

    output = face_mesh.process(rgb_frame)

    landmark_points = output.multi_face_landmarks

    frame_h, frame_w, _ = frame.shape

    if landmark_points:

        landmarks = landmark_points[0].landmark

        for id, landmark in enumerate(landmarks[474:478]):

            x = int(landmark.x * frame_w)

            y = int(landmark.y * frame_h)

            cv2.circle(frame, (x, y), 3, (0, 255, 0))

            if id == 1:

                screen_x = screen_w * landmark.x

                screen_y = screen_h * landmark.y

                pyautogui.moveTo(screen_x, screen_y)

        left = [landmarks[145], landmarks[159]]

        for landmark in left:

            x = int(landmark.x * frame_w)

            y = int(landmark.y * frame_h)

            cv2.circle(frame, (x, y), 3, (0, 255, 255))

        if (left[0].y - left[1].y) < 0.004:

            pyautogui.click()
```

```
pyautogui.sleep(1)
cv2.imshow('Eye Controlled Mouse', frame)
cv2.waitKey(1)
```