const myImageModelURL = 'https://teachablemachine.withgoogle.com/models/bxDC7\_jmp/';

let myImageModel;

let resultDiv;

let serial;// variable to hold an instance of the serialport library

let portName = 'COM6';// fill in your serial port name here

let outByte = 0;// for outgoing data

let video;

function preload() {

video = createCapture(VIDEO);

myImageModel = ml5.imageClassifier(myImageModelURL+"model.json");

}

function setup() {

resultDiv = createElement('h1', '...');

serial = new p5.SerialPort(); // make a new instance of the serialport library

serial.on('error', serialError); // callback for errors

serial.open(portName); // open a serial port

myImageModel.classify(video, gotResults);

}

function serialError(err) {

console.log('Something went wrong with the serial port. ' + err);

}

function gotResults(err, results) {

if (err) console.log(err);

if (results) {

console.log(results);

// Wait for 0.5 second before classifying again

setTimeout(() => myImageModel.classify(video, gotResults), 500);

if (results[0].confidence < 0.7) return;

resultDiv.html('Result is: ' + results[0].label);

console.log(results[0].label);

if (results[0].label === 'ape') {

outByte = 1;

} else if (results[0].label === 'monkey') {

outByte = 2;

} else if (results[0].label === 'boar') {

outByte = 3;

} else if (results[0].label === 'bear') {

outByte = 4;

} else if (results[0].label === 'chimpanzees') {

outByte = 5;

} else if (results[0].label === 'deer') {

outByte = 6;

} else if (results[0].label === 'leopard cat') {

outByte = 7;

} else if (results[0].label === 'lion') {

outByte = 8;

} else if (results[0].label === 'tiger') {

outByte = 9;

} else if (results[0].label === 'elephant') {

outByte = 10;

} else {

outByte = 0;

}

// send it out the serial port:

console.log('outByte: ', outByte)

serial.write(outByte);

}

}