

# P#3 Android

by Transform

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# Idea : android

An android looks like a human on the outside,

but when the inside of the body is exposed

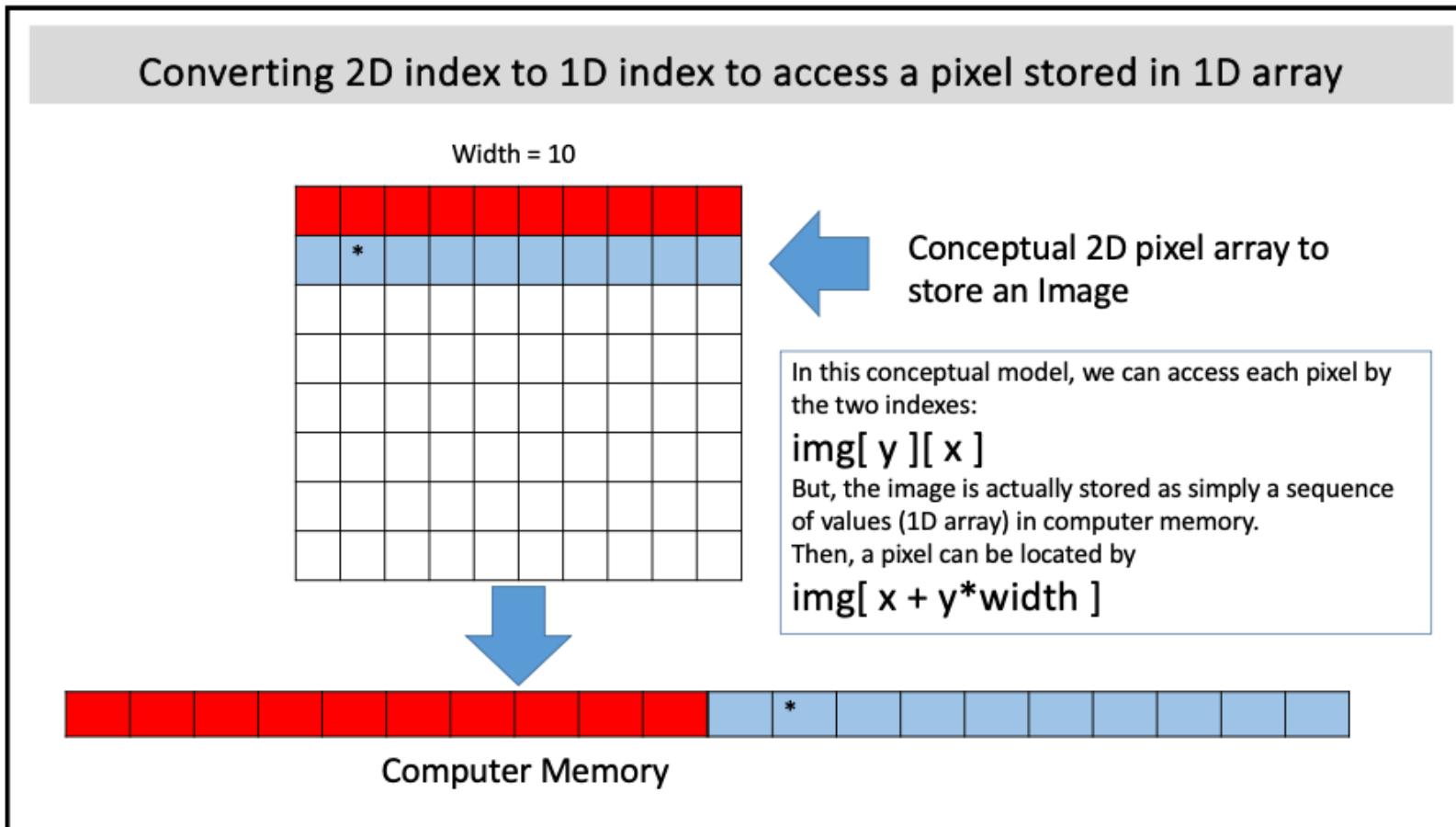
due to a scratch, it is revealed as an android.

I wanted to express this through video capture.



SOURCE : 시사위크 / THE FACT

# Idea : pixel stored in 1D array



SOURCE : L3\_Transform

# Process

global section | declare 'prevFrame' by global variable

setup | setup the video & initialize 'prevFrame'

draw | video mirroring  
outputting video on the below  
compare current and previous frames  
if difference is bigger than 75(distance),  
change point shows circle(random color, size by difference)  
save the current frame to prevFrame

# Code

```
1 import processing.video.*;
2
3 Capture video;
4 color[] prevFrame;
5
6 void setup() {
7     size(640, 480);
8
9     String[] cameras = Capture.list();
10    if (cameras.length > 0) {
11        video = new Capture(this, cameras[0]);
12        video.start();
13    } else {
14        println("No cameras available");
15        exit();
16    }
17
18    // initialize 'color' that save the pixel value of previous frame
19    prevFrame = new color[width * height];
20}
21
22 void draw() {
23    if (video.available() == true) {
24        video.read();
25
26        // video mirroring
27        scale(-1,1);
28        translate(-width,0);
29
30        loadPixels();
31
32        // outputting video on the below
33        image(video, 0, 0, width, height);
34
35        // compare current and previous frames
36        for (int i = 0; i < pixels.length; i++) {
37            color current = video.pixels[i];
38            color prev = prevFrame[i];
39
40            float diff = dist(red(current), green(current), blue(current),
41                               red(prev), green(prev), blue(prev));
42
43            // if difference is bigger than 80(distance)
44            if (diff > 75) {
45                // change point shows circle(random color)
46                fill(random(255), random(255), random(255));
47                noStroke();
48                ellipse(i % width, i / width, diff / 25, diff / 25);
49            }
50        }
51
52        // save the current frame to prevFrame
53        arrayCopy(video.pixels, prevFrame);
54    }
55}
```

# Screenshot

This is a representation of what an Android looks like from a body part.

