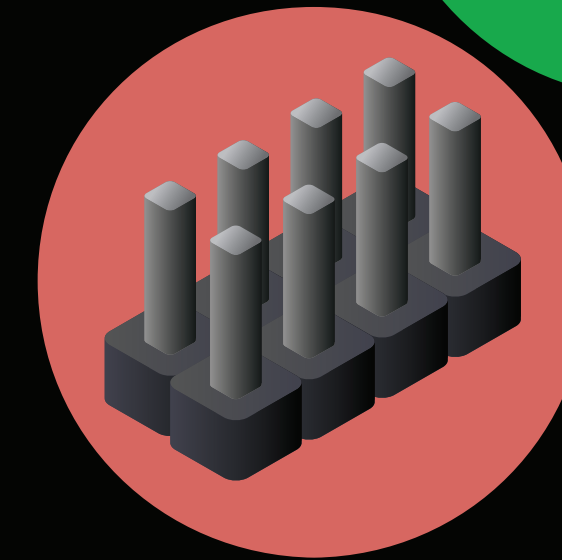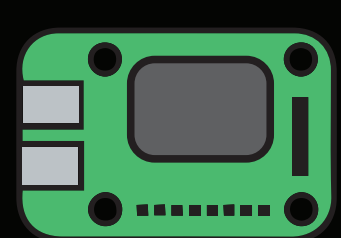# Interacting with reality:

Julia and Jetson Nano

GPIO PORTS

A General Purpose Input/Output is a generic pin whose value consists of one of two voltage settings (HIGH or LOW).

PACKAGE

```julia
function blink(channel::Int)
    GPIO.setmode()
    GPIO.setup(channel, "OUT", GPIO.HIGH)
    try
        while true
            GPIO.output(channel, GPIO.HIGH)
            sleep(0.1)
            GPIO.output(channel, GPIO.LOW)
            sleep(0.1)
        end
    finally
        GPIO.output(channel, GPIO.LOW)
        GPIO.cleanup()
    end
end

output_pin = 32
blink(output_pin)
```
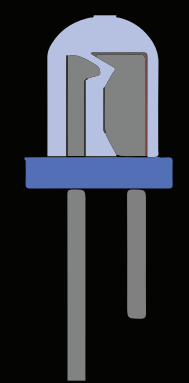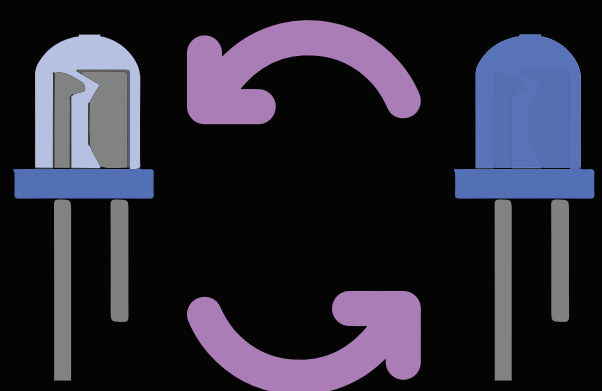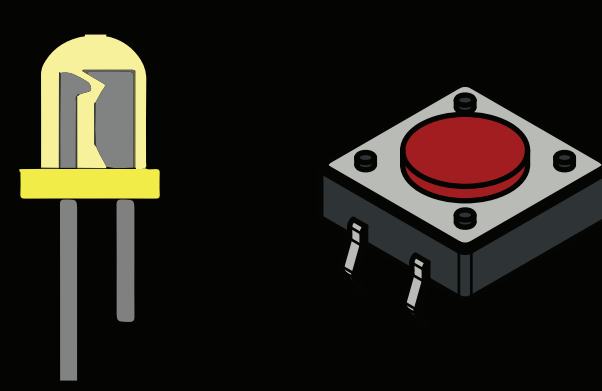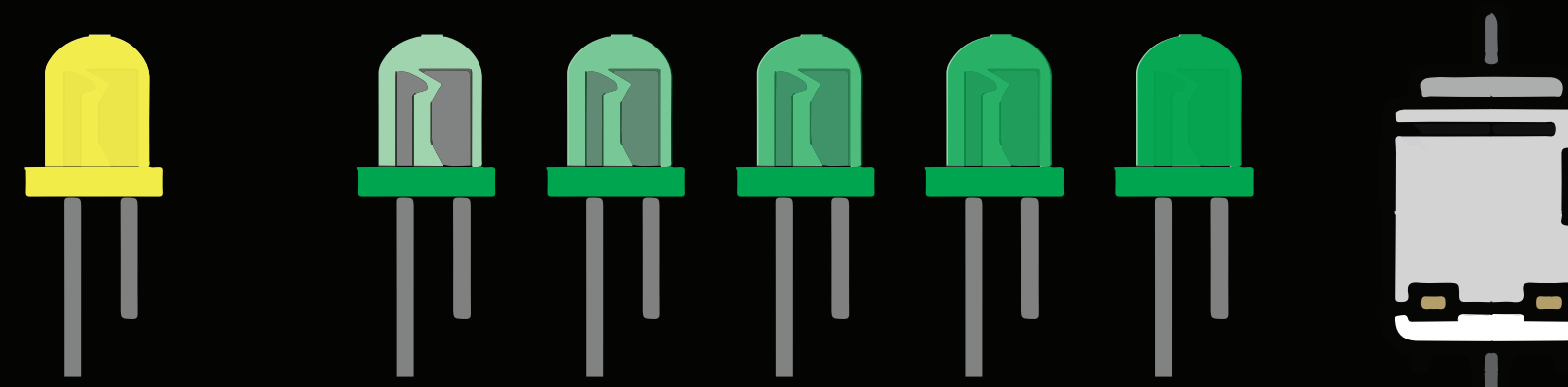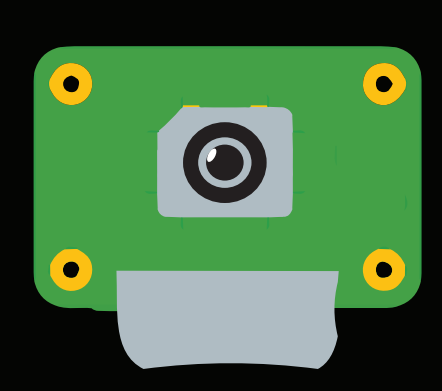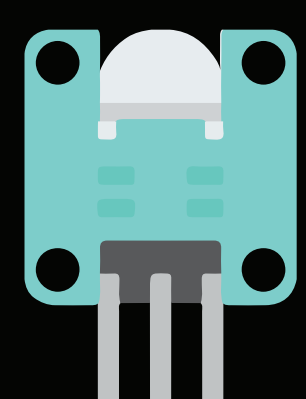
GOAL

- To have a pure Julia package to control the GPIO ports and the camera of a Jetson Nano.

- To make Julia more accesible.

- To make Julia interactive.

- To develop more solutions with Julia.

RESULTS

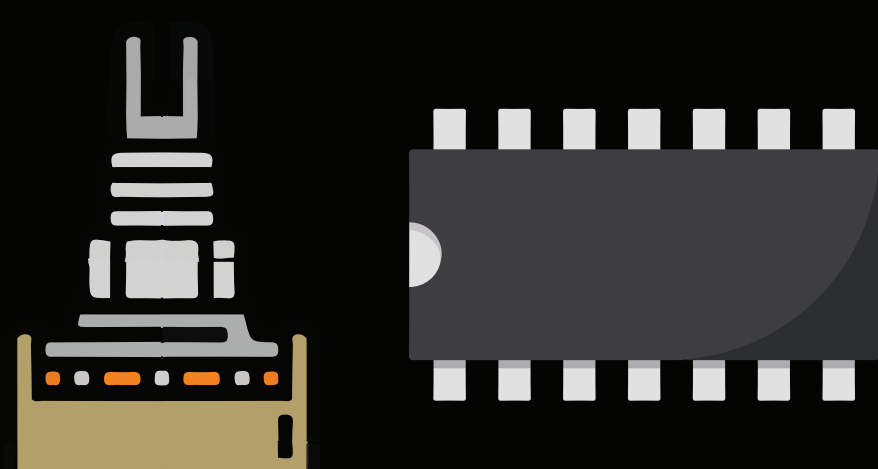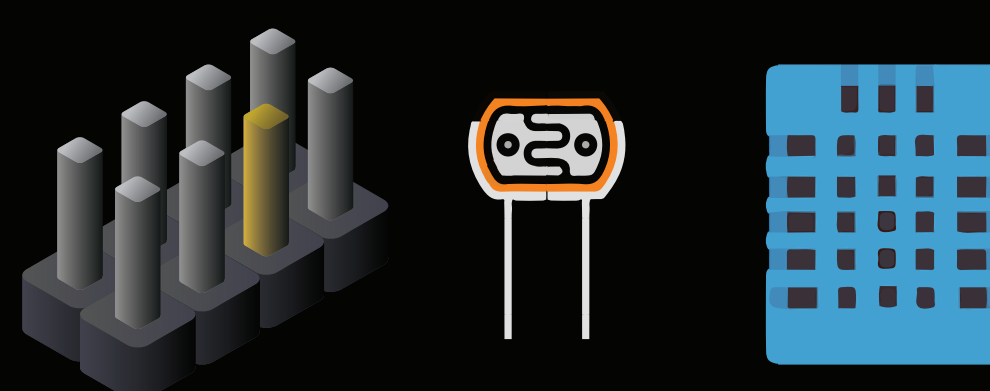**OUTPUT**   **INPUT & OUTPUT**   **PWM OUTPUT**   **CAMERA**
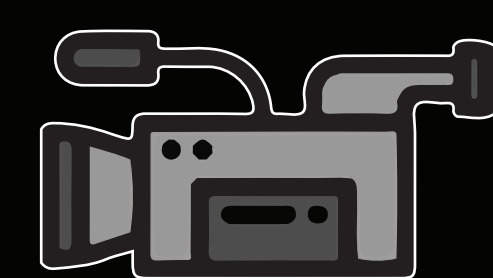
CONCLUSIONS AND FUTURE WORK

PWM INPUT   **SENSORS & COMMUNICATIONS**   **VIDEO CAMERA**

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