Mereni vlhkosti DHT11 (dve verze)

https://learn.adafruit.com/dht-humidity-sensing-on-raspberry-pi-with-gdocs-logging/overview



PYTHON

import RPi.GPIO as GPIO

import time

def bin2dec(string\_num):

 return str(int(string\_num, 2))

data = []

GPIO.setmode(GPIO.BCM)

GPIO.setup(4,GPIO.OUT)

GPIO.output(4,GPIO.HIGH)

time.sleep(0.025)

GPIO.output(4,GPIO.LOW)

time.sleep(0.02)

GPIO.setup(4, GPIO.IN, pull\_up\_down=GPIO.PUD\_UP)

for i in range(0,500):

 data.append(GPIO.input(4))

bit\_count = 0

tmp = 0

count = 0

HumidityBit = ""

TemperatureBit = ""

crc = ""

try:

 while data[count] == 1:

 tmp = 1

 count = count + 1

 for i in range(0, 32):

 bit\_count = 0

 while data[count] == 0:

 tmp = 1

 count = count + 1

 while data[count] == 1:

 bit\_count = bit\_count + 1

 count = count + 1

 if bit\_count > 3:

 if i>=0 and i<8:

 HumidityBit = HumidityBit + "1"

 if i>=16 and i<24:

 TemperatureBit = TemperatureBit + "1"

 else:

 if i>=0 and i<8:

 HumidityBit = HumidityBit + "0"

 if i>=16 and i<24:

 TemperatureBit = TemperatureBit + "0"

except:

 print "ERR\_RANGE"

 exit(0)

try:

 for i in range(0, 8):

 bit\_count = 0

 while data[count] == 0:

 tmp = 1

 count = count + 1

 while data[count] == 1:

 bit\_count = bit\_count + 1

 count = count + 1

 if bit\_count > 3:

 crc = crc + "1"

 else:

 crc = crc + "0"

except:

 print "ERR\_RANGE"

 exit(0)

Humidity = bin2dec(HumidityBit)

Temperature = bin2dec(TemperatureBit)

if int(Humidity) + int(Temperature) - int(bin2dec(crc)) == 0:

 print "Humidity:"+ Humidity +"%"

 print "Temperature:"+ Temperature +"C"

else:

 print "ERR\_CRC"

Celej python kod je nestabilni.

**python AdafruitDHT.py 11 4**

11 typ cidla

4 GPIO (BCM)

Co treba pouzit rozumny kod a navic data rvat do Google Tabulky?

Mrk na

https://docs.google.com/spreadsheets/d/1aVZZY\_qGac6p1JsgA8761cXx39GJzHiCMDA6faMCA0U/edit#gid=0