## Twitter Controlled Christmas Lights Instruction Manual

## You will need:

- 1. Christmas lights
- 2. Arduino Uno with an Ethernet Shield
- 3. Twitter account
- 4. MQTT

## **Instructions:**

**Step 1.** Attach the Christmas lights to the Arduino with the help of figure 1 below.

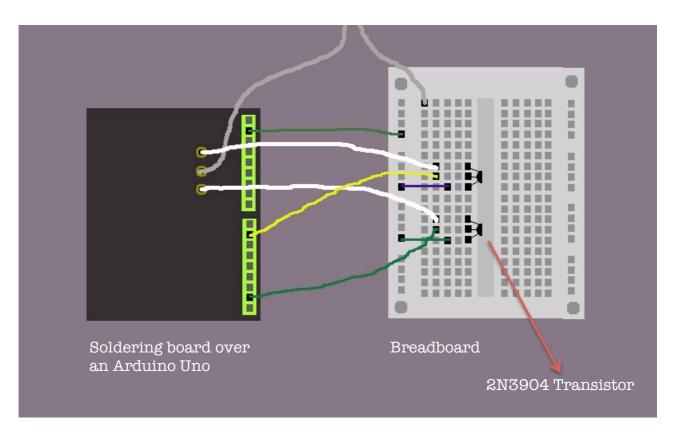


Figure 1: Layout of hardware.

**Step 2.** Open the CL.py python script and add your own twitter account information as asked of in lines 8-12.

```
# ---- INSERT YOUR ACCOUNT INFORMATION BELOW -----
9 CONSUMER_KEY = "INSERT YOUR CONSUMER KEY HERE"
10 CONSUMER_SECRET = "INSERT YOUR CONSUMER SECRET KEY HERE"
11 ACCESS_KEY= "INSERT YOUR ACCESS KEY HERE"
12 ACCESS_SECRET = "INSERT YOUR ACCESS SECRET KEY HERE"
```

Figure 2: Lines 8-12 of python script CL.py.

## **Step 3.** Open MQTT and subscribe to topic "ChristmasLights"



Figure 3: Snapshot of MQTT.

- **Step 4.** Run the python script
- **Step 5.** Message a pattern name to the twitter account

**Step 6.** Enjoy the amazing light display!

