Step-1:

Connect the watch to laptop and ready to run the code by changing the ssid and password. And make sure the 24th line http:// is following your address, where you can find by going AWS ec2.

```
. . .
                                     sketch_A5 | Arduino 1.8.7
  sketch_A5 §
 1 #include <SimpleDHT.h>
 4 #include <HTTPClient.h>
 6 const char* ssid = "Yanjun";
7 const char* password = "12345678";
10 // for DHT11,
           VCC: 5V or 3V
11 //
           GND: GND
           DATA: 21
13 //
14 int pinDHT11 = 21;
15 SimpleDHT11 dht11(pinDHT11);
16
18 void sendData(float t, float h)
if ((WiFi.status() == WL_CONNECTED)) { //Check the current connection status
       HTTPClient http:
22
23
       http.begin("http://18.206.94.215:3000/setValue?t=" + String(t) + "&h=" + String(h));
25
26
      int httpCode = http.GET();
                                                                            //Make the request
      if (httpCode > 0) { //Check for the returning code
           String payload = http.getString();
29
           Serial.println(httpCode);
30
           Serial.println(payload);
```

Step-2, Make sure the computer is connecting to "asu"



Step 3

Then, you should open the terminal to run the following code.

\$ ssh -i ~/Downloads/AME394F2019.pem <u>ubuntu@Your Ubuntu's ip address</u>, 18.206.94.215

Then you will need to CD to your ubuntu's AME394Fall2019 folder

\$ cd AME394Fall2019/cloudLogDHT11

~/AME394Fall2019/cloudLogDHT11\$ git pull

~/AME394Fall2019/cloudLogDHT11\$ npm install mongodb

~/AME394Fall2019\$ cd

~\$ rm -rf AME394Fall2019/

~\$ git clone https://github.com/tejaswigowda/AME394Fall2019.git

\$ cd AME394Fall2019/cloudLogDHT11/

AME394Fall2019/cloudLogDHT11\$ node server.js

AME394Fall2019/cloudLogDHT11\$ forever restartall

AME394Fall2019/cloudLogDHT11\$ vi server.js

AME394Fall2019/cloudLogDHT11\$ forever stopall

AME394Fall2019/cloudLogDHT11\$ forever start server.js

AME394Fall2019/cloudLogDHT11\$ forever stopall

AME394Fall2019/cloudLogDHT11\$ node server.js

Control c to escape

AME394Fall2019/cloudLogDHT11\$ npm install mongodb@2.2

AME394Fall2019/cloudLogDHT11\$ node server.js

Or you can use forever start server.js

(But in the point, my mongo db never works before, and I cannot do "forever" too. But I listed for reference.

If you Mongo db works, please go open Mongo DB, and type you ip address as Localhost. the Prof number is default: 27017.

Mongo db allow you to create a database on git bash.

then on your ubuntu machine you can type: mongo. From here you can use commands such as db, show dbs, use <Data Base>, and other commands.

then you should see a database that is being received temperature and humidity data from sensor on the mongodb compass.

There is a graph diagram which explain how the behind logic and how this tutorial is working.

