

Lab: MicroPython: Machine Learning and MQTT

The goal of this exercise is to practice with the new Dashboard 2.0 from Node-Red and make an end-to-end system including the Arduino.

To understand the basic principles of Dashboard 2.0 in Node-Red (aka FlowFuse Dashboard) you can follow this introductory tutorial:

<https://www.youtube.com/watch?v=DFNv91TTt68>

The goal of this lab is for you to complete and adapt the second tutorial:

<https://www.youtube.com/watch?v=Ecno0EuLyKQ>

Please take into account that the second tutorial includes (in the comments) some links to some additional flows used in the demo, (like with the finance data), and you can just copy those flows in the clipboard and insert them into your flow.

The adaption consists of the following: in the part of the tutorial where the node-red receives data from an external hardware (a Raspberry Pi in that case) you will substitute the input node with an MQTT-in node receiving data from your Arduino.

For the purposes of this Lab, it is enough if you receive and visualize the temperature (or any other data).

To submit:

- Your node-red flow exported as a JSON
- A screenshot of your dashboard at the end of the exercise.