

## Scientific MicroPython on Microcontrollers Tutorial Instructions

The tutorial speaker will bring one hardware kit, i.e., Pycom LoPy4 (<https://pycom.io/product/lopy4/>) + Expansion Board + LoRa antenna + BME280 sensor + MPU6050 sensor + jumper cables) for each of one of the 30 attendees.

**Each attendee is expected to have a Linux or Mac OS or Windows computer with an microUSB cable, plus the following free softwares installed :**

- Telnet and FTP clients :

<https://docs.pycom.io/chapter/gettingstarted/programming/repl/telnet.html>

<https://docs.pycom.io/chapter/gettingstarted/programming/FTP.html>

- terminal tool (screen on Linux/Mac OS), PuTTY (or similar) on Windows;

<https://docs.pycom.io/chapter/gettingstarted/installation/drivers.html>

<https://docs.pycom.io/chapter/gettingstarted/programming/repl/serial.html>

- rshell (<https://github.com/dhylands/rshell>);

- ampy (<https://github.com/adafruit/ampy>);

- Atom editor with PyMakr plugin :

<https://atom.io/>

<https://docs.pycom.io/chapter/pymakr/installation/atom.html>

- and/or Visual Studio Code with PyMakr plugin :

<https://code.visualstudio.com/>

<https://docs.pycom.io/chapter/pymakr/installation/vscode.html>

Some tools above are redundant, but it is better to have some redundancy if some tool doesn't work on the attendee configuration, and to the attendee chose which one is of his/her preference.

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The tutorial scripts need the hardware kit, so they won't be useful for the majority of users (who don't have the hardware) before the tutorial.