

The Weather Station Control for the new EEE Weather Station

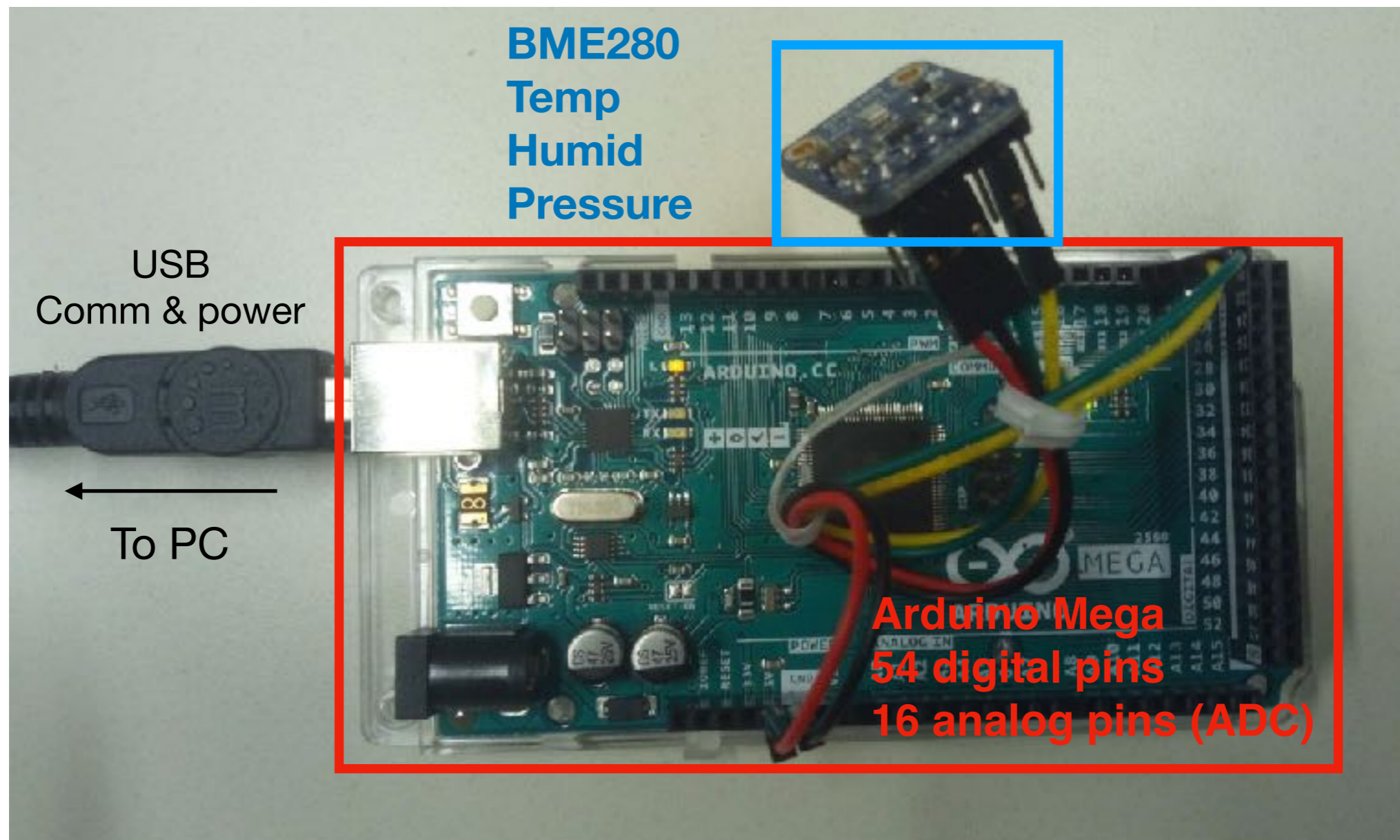
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Enrico Fermi

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Weather station prototype in Bologna



Arduino code here: <https://github.com/centrofermi/wsc/blob/master/arduino/sketch.ino>

Weather Station Control

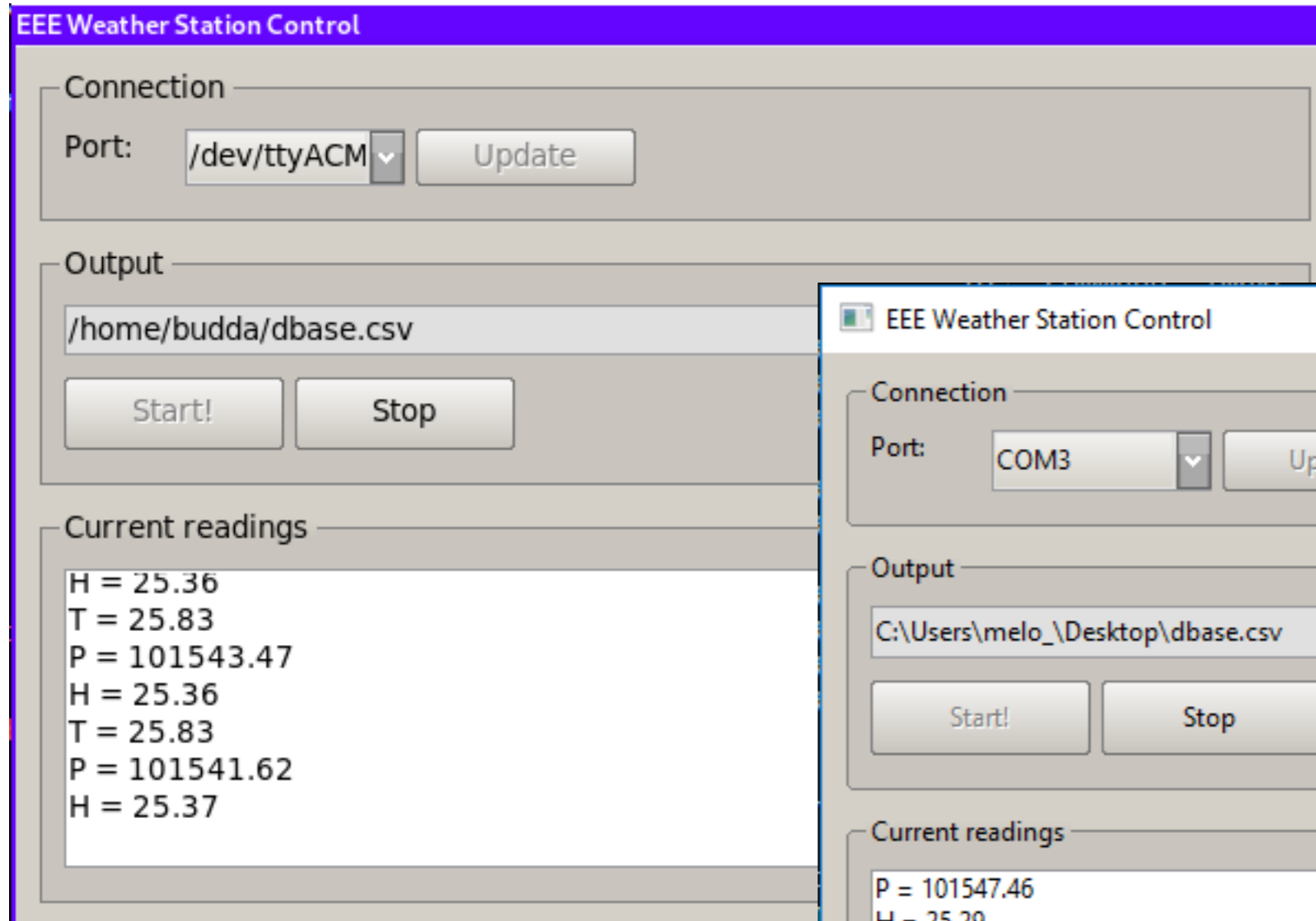
- Is a C++ GUI software to acquire environmental data from local sensors
- High-quality libraries + Modern C++
- Cross-platform: runs on Windows, Linux and macOS
- Periodically writes to file the data read from the WS and a timestamp
- Easy to install and use:
 - comes with a standard windows installer
 - completely self-contained (no need to install drivers, libraries, additional setup)
 - weather-station-port auto detection
- Exports data in the same format as the current Oregon Scientific Weather Station (CSV, agreed with Roman)
- <https://github.com/centrofermi/wsc>

Output file (CSV)

```
$ cat ~/dbase.csv
201901111716,0,0,0,0,0,25.77,25.77,0,0,0,0,0,0,0,0,0,0,0,0,0,209.047
201901111716,0,0,0,0,0,25.79,25.79,0,0,0,0,0,0,0,0,0,0,0,0,0,216.047
201901111716,0,0,0,0,0,25.8,25.8,0,0,0,0,0,0,0,0,0,0,0,0,0,216.422
201901111716,0,0,0,0,0,25.81,25.81,0,0,0,0,0,0,0,0,0,0,0,0,0,215.953
201901111716,0,0,0,0,0,25.81,25.81,0,0,0,0,0,0,0,0,0,0,0,0,0,213.656
201901111716,0,0,0,0,0,25.8,25.8,0,0,0,0,0,0,0,0,0,0,0,0,0,210.156
201901111716,0,0,0,0,0,25.78,25.78,0,0,0,0,0,0,0,0,0,0,0,0,0,211.641
201901111716,0,0,0,0,0,25.81,25.81,0,0,0,0,0,0,0,0,0,0,0,0,0,209.211
201901111716,0,0,0,0,0,25.8,25.8,0,0,0,0,0,0,0,0,0,0,0,0,0,219.547
201901111716,0,0,0,0,0,25.79,25.79,0,0,0,0,0,0,0,0,0,0,0,0,0,212.922
...
```

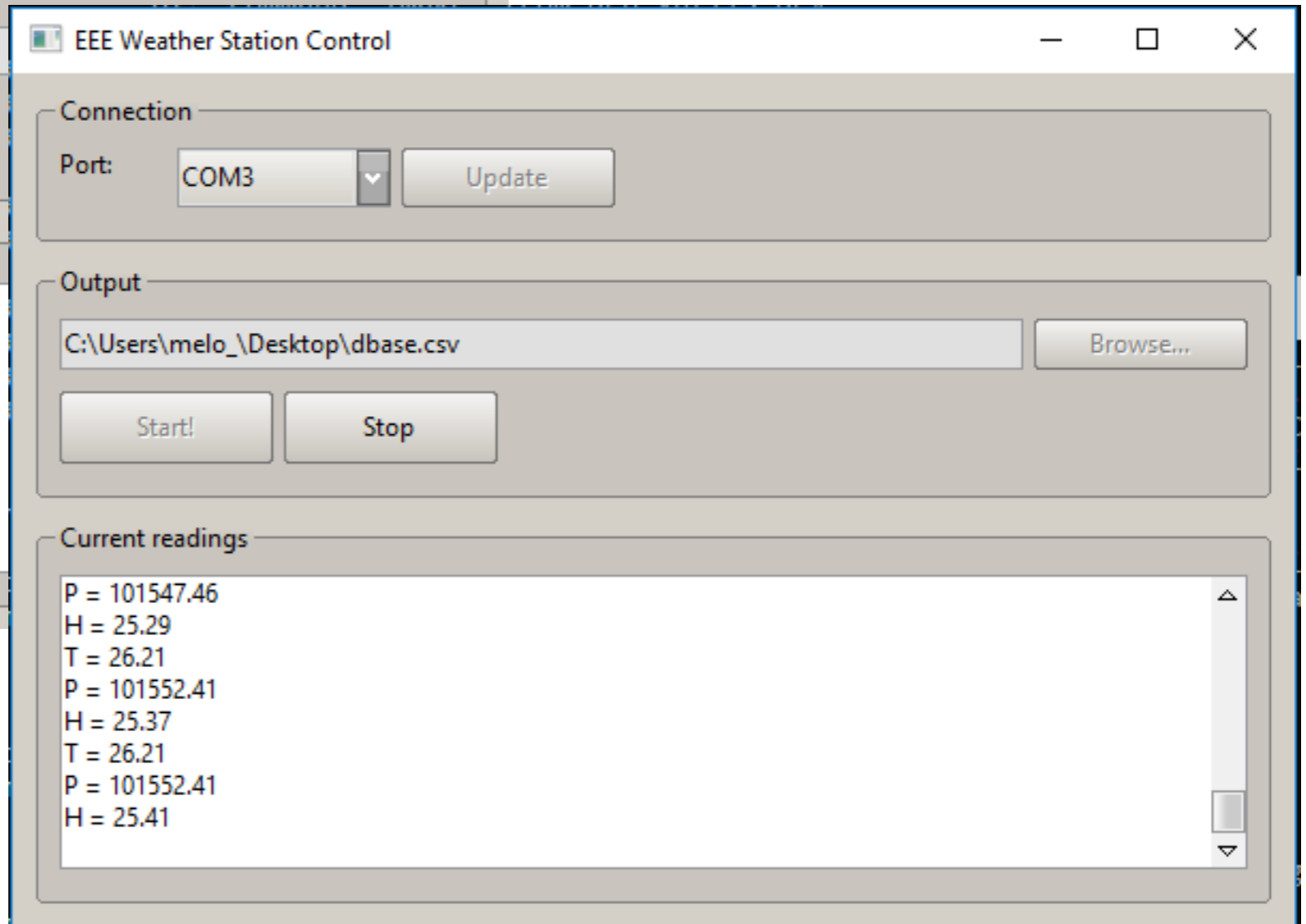
Easy to use for plots, analysis, monitoring...

WSC



Linux

Windows



Current status

- ✓ The hardware components are all almost defined
- ✓ The developing environment is defined
- ✓ The current shape of the code is OK: compiles and runs flawlessly
- ✓ Pre-release available for download from
<https://github.com/centrofermi/wsc/releases/tag/v0.1-alpha>
- ✗ Missing:
- ✗ Integration of the external temperature sensor
- ✗ Calibration facility (?)
- ✗ Testing in a real-conditions setup

**Thank you for your
attention**