

## data acquisition and logging system to CSV file using Python and Arduino

single channel data acquisition and Logging system using Python and Arduino UNO board that will log and save data to a CSV text file on the disk

The system will use an Arduino and an digital in to measure temp data from a DHT thermal sensor

The data coming from the Arduino serial port is logged to a CSV text file and transmitted to a PC using Virtual Serial Port communication

The Python Serial Port data logging script is capable of running on Windows 11,Linux,Mac and saves the time stamped data to a CSV text file on the disk which can be used for data analysis or visualization by the user.

The script read and write to the PC serial port and used Python Signal Handling for controlling the program running on the PC The script.capturing and handling OS signals SIGINT (CTRL +C Using Python3 and using SIGINT Signal to Exit from infinite Loop

RIGOL DS1054Z was used to troubleshoot serial communication errors during initial bring up.

