Arduino Python API

Source code is located in **arduino/Board.py**

**Board Class**

**Usage**

**```**

**board = Board()**

**board.api\_function\_call()**

**```**

**add\_ultrasonic(trig\_pin: int, echo\_pin: int, cb: Callable[[List[int]], None] = default\_sonic\_cb)**

Instantiate an ultrasonic sensor with the board using PyMata3

:param trig\_pin (int): Trigger Pin Number

:param echo\_pin (int): Echo Pin Number

:param cb (Callable): Callback to be called when a reading occurs

:return: None

**setup\_environment():**

This should be called after sensors have been attached to create a buffer

range. This function is called when the Arduinos are pointing at a back

wall. Data points will be read for 5 seconds and the distance from the

Arduino to the wall will be calculated. Acceptable range is between 0 and

Wall distance inclusive.

**sleep(time: float = .1):**

Perform an asyncio sleep for the time specified in seconds.

This method should be used in place of time.sleep()

:param time (int): time in seconds

:returns: No return value

**run():**

Run the collection of data and sending off of data to the server infinetly

# 3rd Party

<https://github.com/MrYsLab/pymata-aio>

Used for direct interactions from Python to Arduino