

**Dept. of Biomechatronics Engineering, National Taiwan University**  
**Automated System Design**  
**Lab. 4**

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Deadline: Demo to TA, before Nov 24<sup>th</sup>

Finish the following items 4-1, 4-2, 4-3 and 4-4 of the Lab. 4.

4-1 Communication: Use Esp8266 to communicate with the outside world via WiFi.

4-2 A publisher uses an accelerometer as a falling detector and publish emergency messages: Use the accelerometer of MPU6050 as a fall detector for the elderly and issue this emergency message to a public broker, e.g., HiveMQ.

4-3 Build a subscriber to receive the alert message: Use python to write a program for the subscriber (with paho MQTT module). The subscriber receives the alert message from the broker.

4-4 Output the alert message: The subscriber sends the alert message to Line notify and triggers the buzzer,.