

# RonBroomStick

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- Begin i2c communication
- Initialize Imu
- configure accelerometer and gyroscope
- calibrate the Imu
- request the data from the sensor every 100ms by using timer library
- read the roll value from the register
- scale the roll value from int value to the correct reading:  $(\text{reading} * \text{fullScaleRange}) / \text{max int16 value}$
- multiply the scaled value by 100 ms to covert from deg/s to deg
- repeat last 3 steps from pitch value
- If the roll or the pitch  $\geq 60$  flash the red led, else stop the led