Brake Testing Software Plan

**Objective:** Test functionality of brake software

**Hardware:** Raspberry Pi, STM32

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| **Test Description** | **Test Steps** | **Expected Output** | **Status Notes** |
| Braking Condition | Output voltage from RPi to either analog pin | Braking condition, GPIO lights up |  |
| Disconnected condition | Output low from RPi to either analog pin | Disconnected condition triggers, no light |  |
| Sensor Error Test | Output low to analog pin 1 and high to analog pin 2. | Flicker GPIO | Not implemented yet |
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**Need to Implement:**

* Add functionality to compare the two sensors and signal when they are significantly different, indicating an issue with the one sensor.
* Find max possible value that the analog pins should output and check whether either average is above (might not be able to test using RPi because max is 3.3V.)