**Identifying Gaps in Base Kit (Tri-Track)**

1. The current bot-board on the tri track does not have the capacity to handle everything we require it to do. Some of them being:

* Running two motors (left track and right track)
* Video processing/capturing
* Controlling servos on arm
* Being able to respond to environmental change
* and more
* Solution for 1: We have decided to replace the current bot-board with a Raspberry Pi to control the tri track system. (Action taken: Raspberry pi is currently the platform we are programming the tri track on)

1. Tri track bot-board does not have a USB access point to put in a dongle, which we are choosing to use in the system (including the Dani robot system).

* Solution for 2: We have decided to replace the current bot-board with a Raspberry Pi to control the tri track system, which includes a few USB ports, ethernet port, HDMI port and more. (Action taken: Raspberry pi is currently the platform we are programming the tri track on)

1. The raspberry pi has a slight issue when used as a control board for the tri track system, as the servos for the tri track arm uses 3 pins, where the raspberry pi only allows 2 pins.

* Solution for 3: We are planning to use a servo shield for the raspberry pi to allow the 3 pins to be used on the pi. (Action Taken: servo shield purchased, and in use to program tri track)