Multi-Robot Localization Update

Caleb Lu

Outline

- Goals from Last Meeting
- Goals Achieved
- Issues
- Next Step
- Questions

Goals from Last Meeting

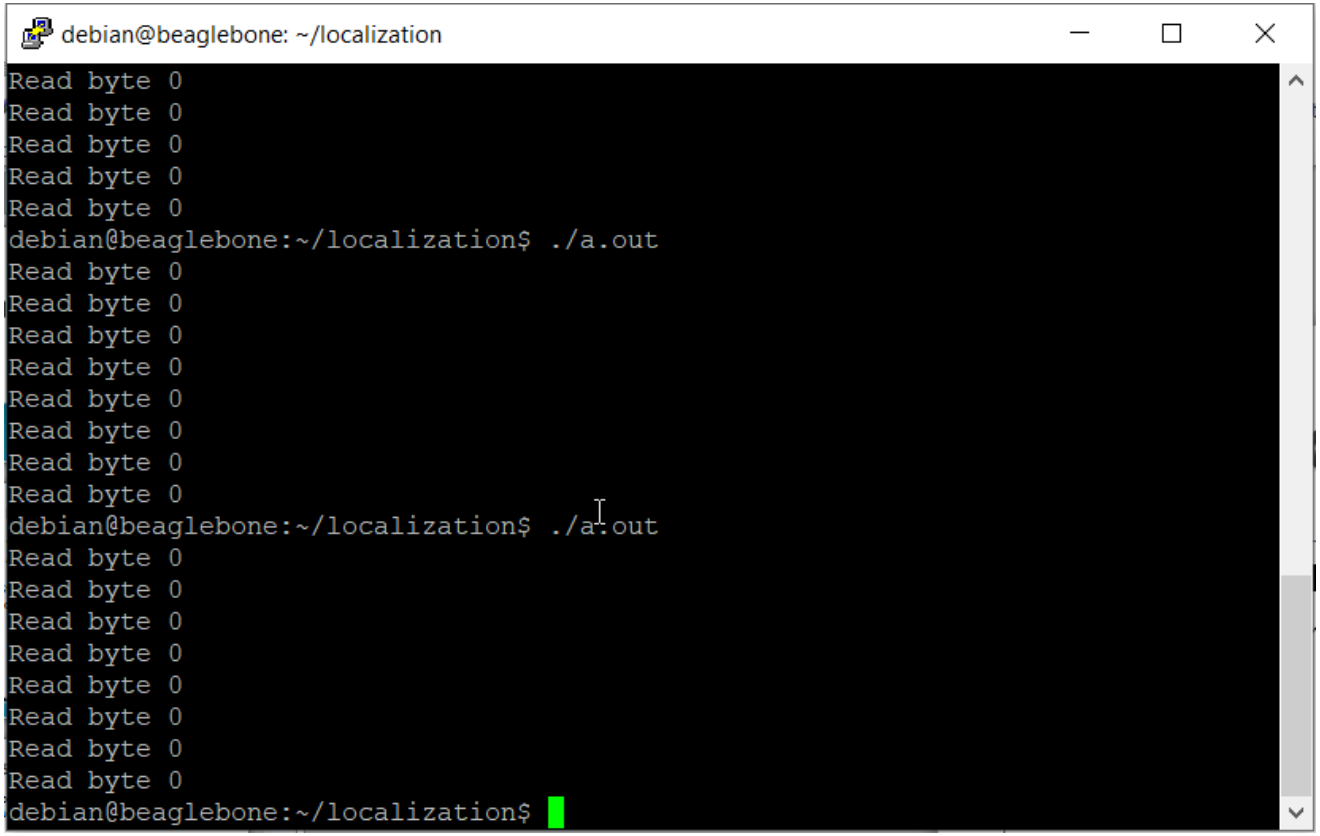
- Get Communication between BBB and the USB interface board

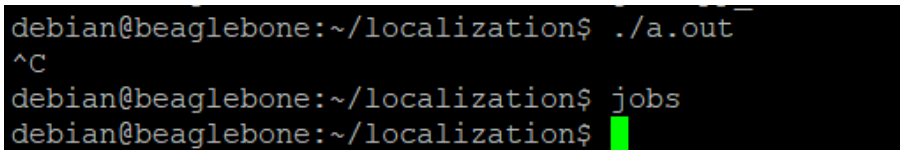
- Write C code to send and receive messages
  - Properly parse messages to interpret message
  - Send and receive specific message to a beacon

Goals Achieved/Status

- Still currently having issues getting connection from the Beagle Bone Blue to the Zigbee board.
- Changed port to the USB serial port and when running code there is a stall. This indicates multiple potential causes:
  - Wrong port
  - Code crash/wrong
  - Wrong setup elsewhere

Issues/Pictures





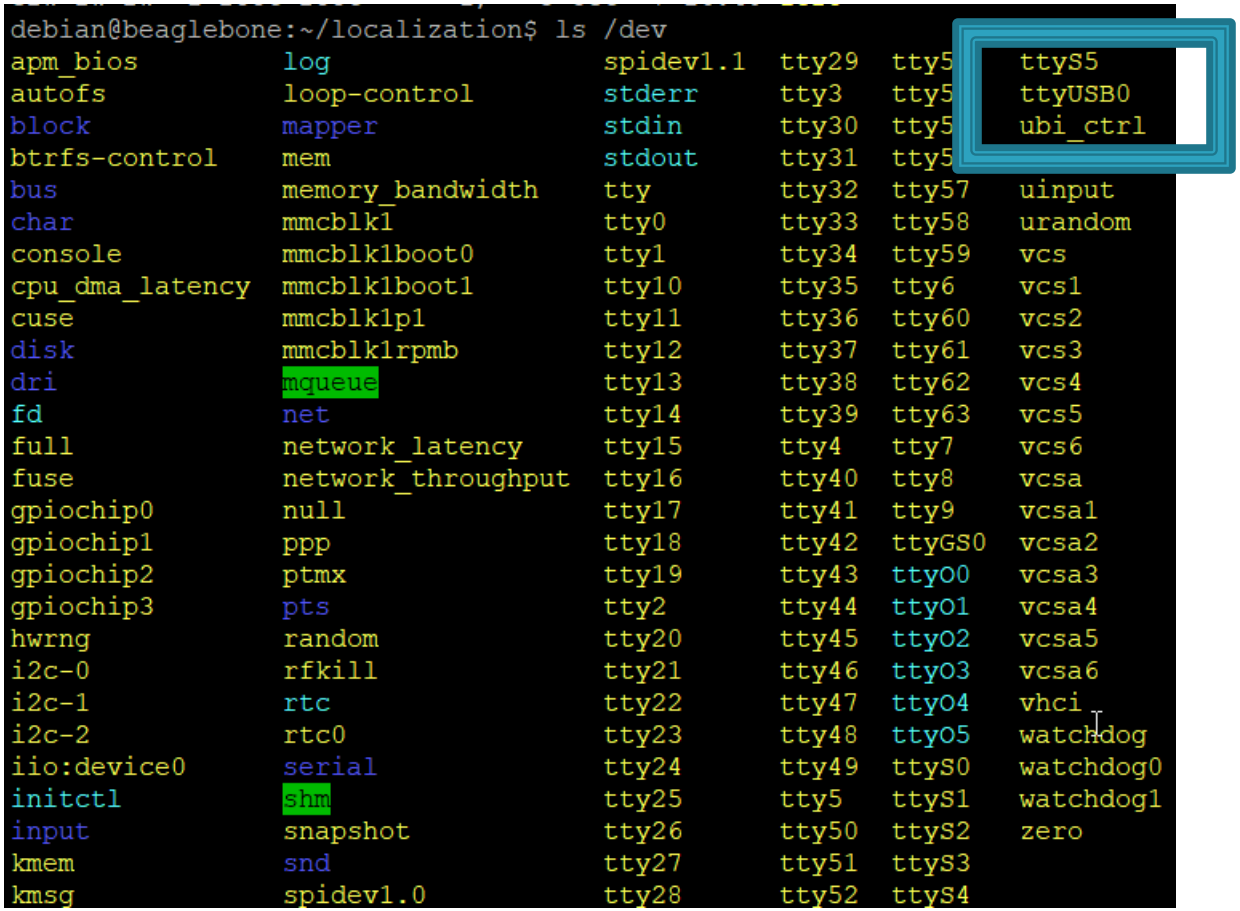
Issues/Pictures

```c
#include <stdio.h>
#include <unistd.h>
#include <fcntl.h>
int main() {
    int tx_byte[8] = {0x7E, 0x00, 0x04, 0x08, 0x01, 0x64, 0x62, 0x30};
        int rx_byte[8]={0};
        int *buff,*rx;
    int fd = open("/dev/ttyUSB0", O_RDWR);
        int i;
        rx = rx_byte;
        buff = tx_byte;
        write(fd, tx_byte, 8);

    ssize_t size = read(fd, &rx, 8);

        for(i = 0; i<8;i++)
                printf("Read byte %X\n", rx[i]);
    return 0;
}
```

Issues/Pictures



Next Step

- Confirm communication between BBB and the USB interface board

- Write C code to :
  - Properly parse messages to interpret message
  - Send and receive specific message to a beacon
  - Output incoming data into a table

Questions?