

//Requesting Float data codes:

case REQ\_FLOAT:

```
    //str_clk = 1;
    Serial.println("Going to send a float");
    //TODO: Put a float (perhaps pi) into a command response and send it.
    //str_clk = str_clk + 1;
    memcpy(res_cmd->data, &f[1], 4); //1
    memcpy(res_cmd->data+4, &f[2], 4); //2
    memcpy(res_cmd->data+8, &f[3], 4); // 3
    memcpy(res_cmd->data+12, &f[4], 4); // 4
    memcpy(res_cmd->data+16, &f[5], 4); //5
    memcpy(res_cmd->data+20, &f[6], 4); //6
    memcpy(res_cmd->data+24, &f[7], 4); // 7
    memcpy(res_cmd->data+28, &f[8], 4); //8
    memcpy(res_cmd->data+32, &f[9], 4); //9
    memcpy(res_cmd->data+36, &f[10], 4); // 10
    memcpy(res_cmd->data+40, &f[11], 4); // 11
    memcpy(res_cmd->data+44, &f[12], 4); //12
    memcpy(res_cmd->data+48, &f[13], 4); //13
    memcpy(res_cmd->data+52, &f[14], 4); // 14
    memcpy(res_cmd->data+56, &f[15], 4); //15
    memcpy(res_cmd->data+60, &f[16], 4); //16
    memcpy(res_cmd->data+64, &f[17], 4); // 17
    memcpy(res_cmd->data+68, &f[18], 4); // 18
    memcpy(res_cmd->data+72, &f[19], 4); //x odom
    memcpy(res_cmd->data+76, &f[20], 4); //y odom
    memcpy(res_cmd->data+80, &f[21], 4); //yaw
    res_cmd->command_type = GIVE_FLOAT;
    amdtpsSendData((uint8_t *)res_cmd, 86);
    break;
```

//receiving commands

```
if (availableMessage()){
    Serial.println("Bluetooth Message:");
    char *str_1 = pullMessage();
    Serial.printf("%s",str_1);
    if(strcmp(str_1, "s") == 0){
        Serial.printf("Start\n");
        str_clk = 1;}
    else if(strcmp(str_1, "c") == 0){
        Serial.printf("Scanning\n");
        scan_flag = 1; }
    else if(strcmp(str_1, "f") == 0){
        Serial.printf("Go straight\n");
        for_time = 1; }
    else if(for_time ==1){
        int test_num = atoi(str_1);
        fwd_time = test_num;
```

```

forward_flag = 1;
for_time = 0;}
else if(strcmp(str_1, "t") == 0){
Serial.printf("turnning\n");
angle_time = 1; }
else if(angle_time == 1){
int test_num = atoi(str_1);
turn_time = test_num;
turn_90_f = 1;
angle_time = 0; }
else if(strcmp(str_1, "a") == 0){
Serial.printf("changing speed\n");
speed_flag = 1; }
else if(speed_flag == 1){
int test_num = atoi(str_1);
motor_speed = test_num;
speed_flag = 0; }
else if(strcmp(str_1, "v") == 0){
Serial.printf("changing speed\n");
f_speed_flag = 1; }
else if(f_speed_flag == 1){
int test_num = atoi(str_1);
f_motor_speed = test_num;
f_speed_flag = 0; }
else if(strcmp(str_1, "w") == 0){
Serial.printf("changing speed\n");
t_speed_flag = 1; }
else if(t_speed_flag == 1){
int test_num = atoi(str_1);
t_motor_speed = test_num;
t_speed_flag = 0; }
printOverBluetooth("Message Received.");}

```