

# Paintball Environment Tactical Engagement Recon System

## BCC-4



### Objective

Develop a system to enhance situational awareness in the game of paintball. This system will utilize a Heads-Up Display (HUD) connected to various sensors to present useful information to the user. The sensor information will be recorded and processed through a Raspberry Pi.

Team player locations will be displayed on a map of the field via the HUD. Locations will be updated at regular intervals. Sensor information will be used to approximate low air pressure and low paint levels for the user.



Paintball marker  
with pressure sensor



Recon Snow2 HUD

### Approach:

Modify existing HUD to display required information by:

1. Obtain necessary data from paintball marker.
2. Process and network data via Raspberry Pi
3. Develop android app for HUD
4. Display necessary information on app

### Key Milestones

- |                                    |       |
|------------------------------------|-------|
| • Requirements, design             | 09/15 |
| • All necessary components ordered | 10/15 |
| • Pressure Data recorded           | 10/15 |
| • Backbone network code written    | 11/15 |
| • Developed first android app      | 11/15 |