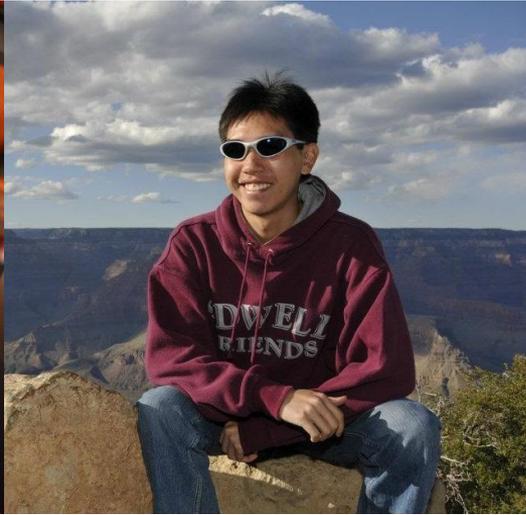


# MidSemester Demo!



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Team BrightGoal (Team 2)

# Project Status

## Project Recap:

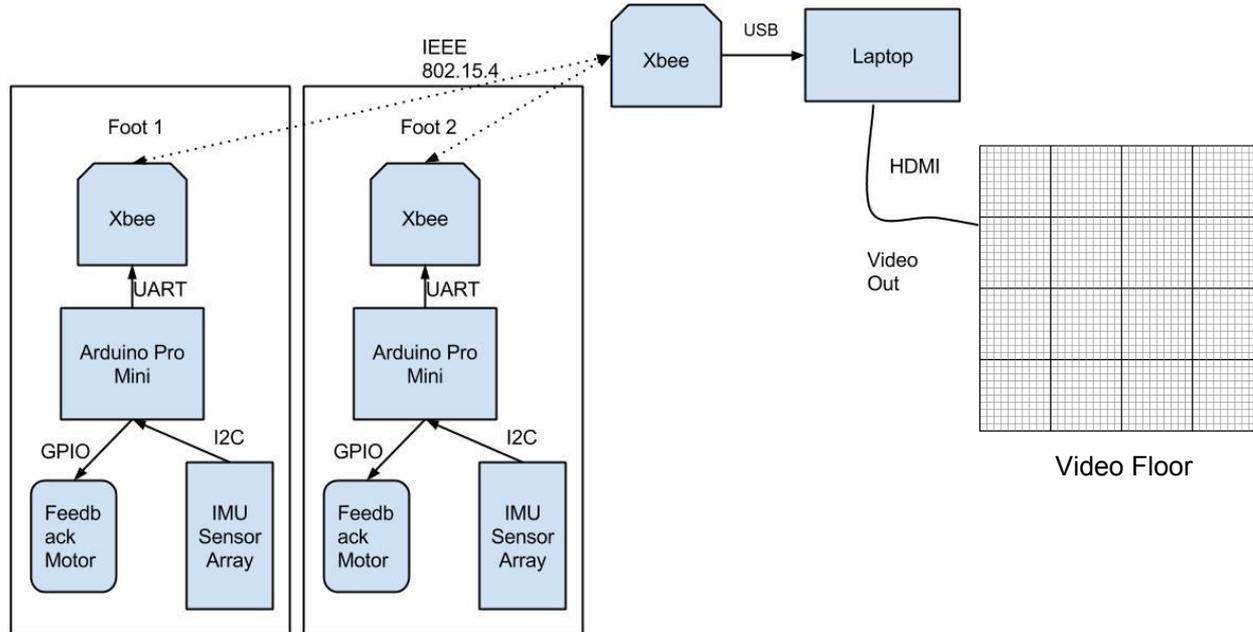
- Training tool for athletes to help with their footwork
- Demo will be an application of our tool an interactive form

## Where we are:

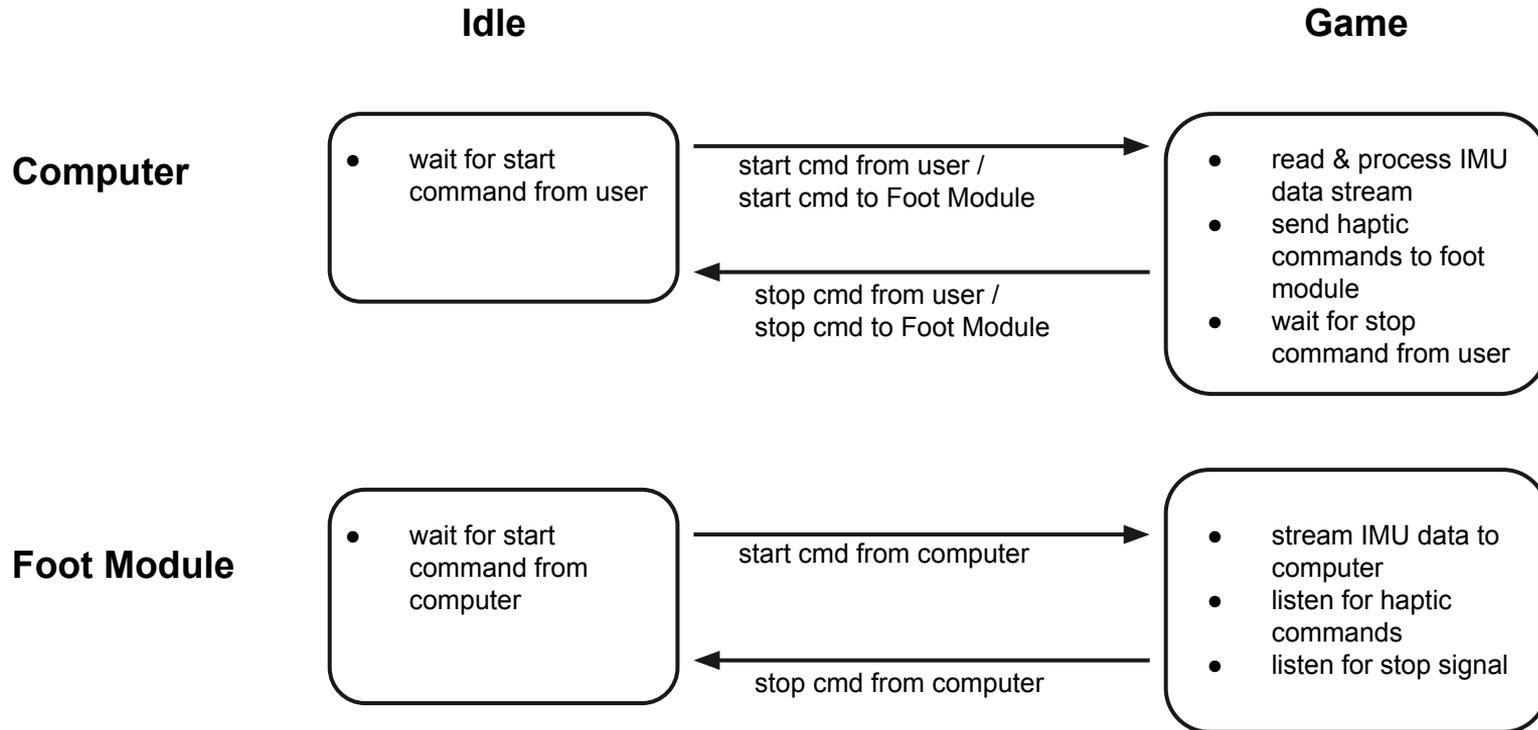
- Parts Ordered!!! Woo
- Consulting Soccer Coaches and Players
- Finalized use cases and mitigations



# Architecture



# State Transition Diagram



# Use Cases

- Footwork Training
  - Agility drills
- Basic Skills
  - Positioning drills
- Practice Feedback
- Game Feedback



# Risks

1. Real Time
  - a. Sensor Data
  - b. Network
  - c. Computer Game
2. Durability
3. Bad IMU Data
4. Battery Life
5. Wireless Interference

# Mitigation

1. Load overhead
  - a. Superlow arduino load + sensor interrupts
  - b. lower sensor resolution
  - c. Fast libraries and languages
2. Custom Housing
3. Keep running average + throw out extremes
4. Bigger battery / Multiple Batteries
5. Timestamp each message