

# SECOND MEETING MINUTES

**Date:** 28/2/2025

**Time:** 14:30 PM

**Facilitator:** Shawn Ge

## IN ATTENDANCE

Brian Ma, Xingyu Luan, Xiang Peng, Yifan Wu, Xu Ben, Xinyu Qiao, Yoyo Lam

## AGENDA

The primary objectives of this meeting were:

1. Discussing the beacon hardware setup and communication mechanism.
2. Reviewing stakeholder identification and the role of external collaborators.
3. Addressing potential risks and technical challenges.
4. Progress report for the lab and experimental setup.
5. Finalizing team member task allocation.

## DISCUSSION AND DECISIONS

### 1. Beacon Hardware & Communication

- The system consists of three beacons, with one acting as the master beacon, sending signals to the others.
- Current testing shows that the master beacon can successfully communicate with all three beacons.
- The distances between beacons still require further evaluation for stability.

### 2. Technical Implementation

- The chipset used for beacons is Stem 32.

- The solution currently involves using different frequencies to distinguish between the three beacons.
- The robot platform is Bluervo2, with the beacon's signal reception range tested between 20 cm and 80 m.

### **3. Stakeholders**

The key stakeholders include:

- School authorities
- Clients
- Manufacturers and production teams
- Honor students and research collaborators

### **4. Progress Report for Lab**

- Work continues on refining the experimental setup and testing in different conditions.
- The battery charging process needs optimization for practical use in experiments.
- Further validation is required to confirm if beacons are fully compatible with the robot system.

### **5. Risk Considerations**

Identified risks include:

- Battery charging issues for sustained testing.
- Suitability of beacons for integration with robots.
- Environmental factors affecting beacon signal transmission in experimental setups.

### **6. Team Task Allocation (Audit 1)**

- Project Scope: Xu Ben
- Assumptions and Deliverables: Xiang Peng
- Stakeholder Analysis: Brian Ma
- Timeline and Milestones: Yifan Wu
- Risk Assessment: Yoyo Lam
- Team Structure: Xingyu Luan

- Concept of Operations (ConOps): Wuqiao Xin

## **SUMMARY AND CONCLUSIONS**

- The beacon hardware has been successfully tested with basic communication.
- Identified key stakeholders and their involvement in the project.
- Discussed potential risks, including battery management and beacon compatibility with robots.
- Allocated specific tasks to team members to streamline responsibilities.
- Agreed on further tests to confirm system feasibility.

## **NEST MEETING**

- The next meeting is scheduled for **March 3th at 2:30 PM.**