SIXTH MEETING MINUTES

Date: 16/4/2025
Time: 19:00 PM
Facilitator: Brian Ma

IN ATTENDANCE

Brian Ma, Xingyu Luan, Xiang Peng, Yifan Wu, Xu Ben, YuQiao Xin, Yuk Lam

AGENDA

1. Review of communication method between master and slave beacons
2. Evaluation of unit testing strategies
3. Response to client feedback and adjustments

DISCUSSION AND DECISIONS

1.Communication Strategy Update

Initially, the team attempted to use pulse-based signals to coordinate communication between the master beacon and the three slave beacons.

Due to implementation complexity and technical limitations, this approach proved difficult.

Following client suggestions, the team revised the method to use 8-bit data encoding for communication, simplifying the protocol.

2.Unit Test Method Change

The original plan was to conduct unit tests using the Nucleo board, based on client input.

However, the hardware-based tests yielded poor results and inconsistent performance.

The team decided to shift the unit testing process to a PC-based simulation environment, which proved more reliable and easier to manage.

SUMMARY AND CONCLUSIONS

- The communication protocol was changed from pulse signaling to an 8-bit encoding system based on client feedback and feasibility analysis.
- The unit test approach was revised from Nucleo hardware to desktop simulation after observing unsatisfactory hardware test results.
- These changes improved the stability and manageability of system testing and beacon communication logic.

NEST MEETING

· Next supervisor meeting to be scheduled in May 2nd.