

# Progress Report 11

Stuart, Walt, Dan

## Next Goals and Deliverables

- Change Hamming encoding to 8,4 and to be byte-based (IN PROGRESS) - Dan
- Build routing logic into network layer (IN PROGRESS) - Walt
- Transition from reading bits as characters to bitmasking using uint8t bytes. (IN PROGRESS) - Stuart
- Decode received hex values to ASCII and return them to user (IN PROGRESS) - Dan
- Clean up the functionality of individual classes and increase abstraction (IN PROGRESS) - Walt

## Previous Goals and Deliverables

- Transition from reading bits as characters to bitmasking using uint8t bytes. (IN PROGRESS) - Stuart
- Change Hamming encoding to 8,4 and to be byte-based (IN PROGRESS)- Dan
- Read/write packets across the network layer (DONE) - Stuart/Walt
- ASCII input to byte array of hex vals (DONE) - Dan
- Build routing logic into network layer (IN PROGRESS) - Walt
- Change from fixed stop sequence to timeout (ON HOLD) - Walt/Stuart

## Discussion

- Hoorah! We successfully sent packets over the line (sort of). We still have some debugging left but the proof of concept seems to be discovered. The biggest obstacle has been correctly packing the packet. We learned that 'sizeof' is problematic when handed pointers as it will return the size of the pointer, not the object it is pointing to. By the end of class tomorrow it is reasonable to assume we will have consecutive packet sending and receiving functioning.
- Dan has been working on converting our previous hamming encoding protocol to 8,4 to work better with bytes and increase robustness. Tomorrow he should be ready to merge it into our working codebase.
- The problem Walt and Stuart were stuck up against all weekend took 10 minutes to solve with fresh eyes today. We were not leaving the pi in the right state. Thus, the timeout implementation has been put on hold until we see necessary reason for it.
- Tomorrow Walt will dive into getting static routing implemented. It should not be too hard if our debugging goes smoothly. This will mark near completion of our network layer.