CyWi: Open-Source Wireless Innovation Lab for Smart Ag, AR/VR, and Beyond

Team Number: sddec19-02   **Client**: Dr. Hongwei Zhang   **Faculty Advisor**: Dr. Hongwei Zhang

Team Members

Chenye Lim	Ryan Cullinan
Jian Chew	Shay Willems
Pawel Darowski	Tyler Beder

Dates

March 9 to March 15, 2019

Weekly Summary

We continued our research on existing testbeds by reserving a timeslot to run experiments and performed some of the tutorial-level experiments. Jian Chew demonstrated how to run an experiment on POWDER during our meeting. Ryan confirmed with our professor his findings on the most cost effective NUC to use going forward and 2 NUC8s should be ordered shortly.

Accomplishments

- Ordered 20 of the TI development kits and they will hopefully be shipped after spring break
- Toured the lab space to verify that the cabling has been done and to determine node placement

Pending Issues

- POWDER uses technical terminology (such as HSS, SGPW, CN, RAN) that need more investigation and understanding
- Unknown kernel stability with the NUC8 mini PCs (OAI seems to require a bleeding-edge unstable Linux kernel to function)

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Chenye Lim	Contacted customer support, and placed order for TIs, USB hub, and cables.	5	26

	Started on simple assembly of hardware in CyWi testbed		
Jian Chew	Researched POWDER experiments and performed a demonstration for the team	3	22
Pawel Darowski	Closely researched the ORBIT script system of setting up and running experiments	3	37
Ryan Cullinan	Confirmed with our professor what NUC we will use moving forward	1	21
Shay Willems	Improved Gantt Chart and started assigning individual tasks	1	24
Tyler Beder	Started redoing use case diagram and looked at designing user interface	1	16

Plan for Coming Week

- Refine roadmap with detailed task items and lead/participating team members
- Hardware purchases of SDRs and accessories
- ORBIT and POWDER tour during the next client meeting