

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

April 6 to April 12, 2019

Weekly Summary

This week we compared multiple server hardware options and will soon order a server through the ETG. ETG weighed in on the options presented in this weeks client meeting. Based on the conversation had several of the front runner options are no longer being considered. Hoping to nailed down the selection at the upcoming client meeting. We continued to analyze the Orbit and Powder testbeds to determine how to use scripts to define an experiment environment. Our CyWi testbed will also need to use some scripting to define a resource profile for the user.

Accomplishments

- Narrowed down selection choices for a server PC

Pending Issues

- More research is needed, especially into OpenAirInterface and LTE/5G
- Some of the choice for a server PC are only available from third party sellers.
- ETG advised against several of the front runner choices, further evaluation is required

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Chenye Lim	Started looking into OAI installation and documentation	3	35

Jian Chew	Started looking into OAI installation and documentation	3	35
Pawel Darowski	Continued analyzing how the Orbit and Powder testbed scripts define the experiment profiles	3	52
Ryan Cullinan	Continued working to find a suitable server pc	3	24
Shay Willems	Started looking at TI documentation	4	33
Tyler Beder	Started looking at TI documentation	4	25

Plan for Coming Week

- Select a machine for our lab server
- TI SimpleLink lab survey/tests to measure effective communication reliability in our lab setting
- Refine the main ideas and features of SDRs, CPS motes, and the server
- More ORBIT and POWDER tours during the next client meeting