

## 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

November 9 to November 22, 2019

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### Biweekly Summary

We continued to work towards getting Emulab installed on the server. The FreeBSD virtual machines are able to communicate with each other. Currently working on bridging the network connection from the host domain to the user domains. Signal strength and attenuation values for the Motes and SDRs have been finalized and we are working on getting the necessary documentation for both written.

### Accomplishments

- Have an attenuation value for SDRs and Motes
- All extra hardware has been ordered
- Mounts for Mote antennas have been designed and 3D printed

### Pending Issues

- The antennas are very touchy with how they are positioned
- Get TI RTOS working

### Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Chenye Lim	Tested SDR with the newly order attenuator	15	88
Jian Chew	Tested SDR with the newly order attenuator	8	108

**EE/CprE/SE 492**  
**Biweekly Report 6**

Pawel Darowski	Continued troubleshooting Xen virtualization, FreeBSD networking and Emulab installation	8	91
Ryan Cullinan	Looked into FreeBSD, designed and printed antenna mounts for mounts	8	86
Shay Willems	Testing attenuation and command line code	7	61
Tyler Beder	Testing and Soldering	7	55

**Plan for Coming Week**

- Start on documentation for every devices.